March 1993

Using Electronic Data Interchange to Report Product Quality

DL207R1

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Prepared pursuant to Department of Defense Contract MDA903-90-C-0006.

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Executive Summary

USING ELECTRONIC DATA INTERCHANGE TO REPORT PRODUCT QUALITY

The Product Quality Deficiency Report (PQDR) is a Department of Defense form [Standard Form (SF) 368)] that identifies deficiencies in the manufacture, repair, or procurement of material. It may be used by DoD employees or contractors to identify defects at any point in the item's life. It has two primary goals:

- To identify the significance and extent of defective material in the DoD supply system and thereby prevent loss of readiness, the destruction of property, or loss of life
- To identify the cause of the defect and thus prevent its recurrence and recover for DoD the value of any deficient material.

The DoD generates nearly 75,000 such deficiency reports each year. In most cases when a defect is identified, the SF 368 is completed and sent to the activity managing the contract under which the material was procured. That activity, usually in conjunction with the contractor, investigates the complaint, attempts to determine a cause and a corrective action, and must make some disposition of the defective material.

The potential impact of deficient material makes the processing of PQDRs a sensitive issue within DoD and in DoD's relationship with vendors. Since DoD is paying increasing attention to product quality when making procurement decisions, it is obligated to ensure that complaints are valid and to report vendors that are providing deficient material.

Because of this sensitivity, the current process includes several reviews of each PQDR and typically involves four or more activities. The process is labor- and paper-intensive and time-consuming.

Technology can reduce the costs of the process and at the same time improve timeliness by electronically exchanging discrepancy data between activities. That procedure reduces paper-handling delays and eliminates the error-prone, repetitive

entry of data into diverse computer systems at each activity. Improving the responsiveness of the system will make it more meaningful to end users and help DoD obtain the goals of the quality program.

Electronic data interchange (EDI) is one means of electronically passing PQDR data. It is widely used in industry and increasingly within DoD. Defense Management Report Decision 941 defines DoD's commitment to use EDI and cites the PQDR and other discrepancy reports as early candidates for EDI. In this report, we describe how EDI can be linked to changes in PQDR processing practices to provide further improvements.

In addition to the conversion of the SF 368 to an electronic medium, we recommend the DoD make the following changes to PQDR processing:

- Improve end-user training and automate the generation of PQDRs
- Evaluate forming a central site to receive and process PQDRs within DLA and each of the services
- Establish different levels of PQDR processing based on the cost and criticality of the deficient item
- Consolidate the policies governing PQDRs, the procedures used to process them, and their automation with that of related discrepancy reports.

We identified existing DLA and Service systems that would support EDI processing. The ongoing review of PQDRs processing by the Joint Logistics Systems Center could change the systems used for discrepancy processing. However, regardless of the specific systems or flows, electronic means can be used to efficiently transmit discrepancy data.

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CHAPTER 1

INTRODUCTION

BACKGROUND

The quality of the material the Department of Defense procures and uses is important; if it is poor, DoD loses money and is forced to accept reduced equipment and unit readiness. Worse yet, poor-quality material puts life and property at risk. To ensure high-quality material, DoD has instituted a quality program that enables anyone who discovers defective material to report it. The keystone of that program is the Product Quality Deficiency Report (PQDR), which records defects and initiates the investigative process into the causes of those defects. The causes may be attributable to Government or contractor personnel and may include problems in design, product or rework specifications, component material, procurement, manufacturing, or technical documentation.

Any DoD activity may submit PQDRs for material received either directly from a contractor or through another DoD activity. DoD contractors may submit PQDRs for Government-furnished material (GFM) used in production or overhaul. In all, about 75,000 PQDRs are submitted each year. The investigation and resolution of those PQDRs is currently an expensive, labor- and paper-intensive process. Despite the costs they incur, PQDRs are important because they now contribute to the quality of our equipment and will ultimately contribute to the ability of the Military Services to perform their missions. PQDRs or some alternative form of quality reporting are also a congressional requirement.

PROGRAM OBJECTIVES

The PQDR program has two objectives:

- To identify and isolate defective material wherever it is distributed within the DoD supply system and preclude its use in any way that may contribute to a reduction in equipment or unit readiness, destruction or deterioration of property, or hazard to life

- To identify and eliminate the true cause of a material defect to prevent its recurrence, and compensate DoD by replacing, repairing, or providing credit for the defective material.

BASIS IN LAW AND REGULATION

Public Law 40 U.S. Code 486 is the basis for discrepancy reporting within DoD. It sets forth the General Services Administration's (GSA's) authority and responsibilities for managing Federal property. To fulfill GSA's responsibilities, its administrator published procedures that are currently found in the Code of Federal Regulations (CFR) at 41 CFR Chapter 101. The Federal regulations implement public law and address discrepancy reporting for four broad categories: quality, supply, transportation, and billing.

The GSA Administrator is responsible for managing Federal property; accordingly, the Administrator authorized DoD activities to follow applicable DoD or Military Service/agency regulations in reporting discrepancies or deficiencies in shipments or material or in requesting billing adjustments.

Requirements for reporting discrepancies in DoD are set forth in a variety of regulations that have been coordinated with and concurred in by the GSA Administrator. Consequently, DoD and Service/agency regulations are binding pursuant to a proper legal authority. As a result, procedures specified by DoD regulations are judicially recognized as having the force and effect of law.

Within DoD, the PQDR program is administered by the Directorate of Quality Assurance of the Defense Logistics Agency (DLA). The governing regulation is Joint DLA Regulation (DLAR) 4155.24, *Product Quality Deficiency Report Program.* Applicable Service PQDR regulations are Army Regulation 702-7; Secretary of the Navy Instruction 4855.5; Air Force Regulation 74-6; and Marine Corps Order 4855.5F.

RELATIONSHIP TO OTHER DISCREPANCY REPORTS

The DoD uses a wide variety of discrepancy reports in the design, development, and operation of its equipment. In addition to the PQDR the following two reports are most common:

- The report of discrepancy (ROD), which is also known as the supply discrepancy report. The ROD deals with differences between material that

was received and material that should have been received. Typical differences could involve quantity, item identification, or packaging.

- The transportation discrepancy report (TDR), which reports the loss or damage of material while in transit or the misrouting of material.

Each of these discrepancy reporting programs is administered independently, and each uses a different standard form (SF) to report a discrepancy: the ROD program uses the SF 364; the PQDR uses SF 368; and the TDR uses SF 361. Each report has distinct flows and procedures.

However, they are linked by their similar goals and general concepts, particularly the PQDR and the ROD. The SF 364 and SF 368 contain many of the same data fields, and while the flows vary, many of the same organizations participate in the initiation of both forms and the resultant investigation of the discrepancy. The content and flow of the TDRs varies from the others but its purpose is conceptually the same – it reports deficient material.

The material warranty program is also linked to the PQDR process as it affects how deficient material is handled. Other related programs include equipment improvement reports and deficiencies identified in the research, development, and design phases of new end items.

STUDY TASK AND OBJECTIVE

Recognizing DoD's ever-increasing use of electronic data interchange (EDI) processes and the potential of EDI in PQDR processing, the DoD Executive Agent for EDI in conjunction with DLA tasked the Logistics Management Institute (LMI) to describe a standardized and efficient EDI-based PQDR process for use throughout DoD. This report documents our review of the PQDR process and suggests a functional approach for using EDI.

This task complements previous LMI work. The Defense Logistics Management Standards Office (DLMSO) is using EDI to replace existing DoD inter-Service data formats for supply management. Included in that modernization effort is revision of the ROD. In 1991, DLMSO tasked LMI to review the three major discrepancy reports and evaluate the possibility of unifying the separate procedures under a single DoD program. We were also asked to evaluate the ability to automate

their processing. We published the results of our study in September 1991.[1] That report concluded that the three programs could and should be consolidated. We also concluded that discrepancy processing was highly suited to automated processing but that existing Service automation was generally inadequate and fragmented where it existed. Subsequently, LMI mapped the SF 364 into an EDI transaction for DLMSO.

ORGANIZATION OF THE REPORT

This report documents our analysis of the current PQDR process and recommends ways to convert that process to a more efficient one by using EDI techniques. Chapter 2 describes the current flow of PQDRs and presents our findings and conclusions on the process as they relate to EDI. Chapter 3 defines EDI and provides a functional architecture for applying it to PQDR processing. Chapter 3 also describes the DoD initiative to consolidate its automated systems, including discrepancy processing. Chapter 4, then, presents recommendations for coupling automation of the PQDR with changes in the existing business practice in order to realize the fullest extent of cost savings and reduce processing times.

Appendices A and B are an integral part of the EDI architecture described in Chapter 3. Appendix A provides a draft implementation convention that describes how to relate EDI data formats to PQDR applications. Those formats include an original submission, modifications and responses/investigation reports. Additional conventions for receipt acknowledgment and exhibit request will be provided separately. Appendix B provides similar documentation for a ROD as developed for DLMSO. The ROD data are provided to document coordination between these two related programs and because RODs are also candidates for automation through another DoD initiative.

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[1]LMI Report DL902R2, *The Feasibility of a Single Discrepancy Reporting System*, Donald F. Egan, et al., September 1991.

CHAPTER 2

THE CURRENT PROCESS

DESCRIPTION OF THE CURRENT FLOW

Defense Logistics Agency Regulation 4155.24 defines the flow of PQDRs that are initiated by one Service and processed by another. On the other hand, the flow of a PQDR that is both initiated and resolved within a single Service is defined by that Service's regulation; that flow is generally similar to the inter-Service flow. Two other factors may influence the flow:

- Whether the item is inspected at the source or when received at destination
- Whether the entity responsible for the deficiency is the Government or a contractor.

This chapter focuses on the most typical case – that of an item inspected at the source with the contractor manufacturing or reworking the item believed to be responsible for the discrepancy.[1] Figure 2-1 depicts an overview of that flow, and it is described in the following paragraphs.

FIG. 2-1. OVERVIEW OF TYPICAL PQDR FLOW

[1]The discussion in this and following chapters concentrates on Category II PQDRs which are the more numerous by far. Category I PQDRs (those presenting a safety hazard or having immediate major impact upon equipment) follow similar flows but should be handled by telephone, facsimile machines, and any other expedient means that will satisfy the urgency of the specific discrepancy.

Originating Point

A PQDR is generated when a quality deficiency is discovered at any point in the item's life cycle. Most commonly, discrepancies are found during the following actions:

- Inspection upon receipt
- Manufacture or assembly of an end item by a contractor using GFM
- Random sampling or testing of material as part of the DoD quality program
- Active operation
- Maintenance and testing of the spare part or its end item.[2]

Personnel at the originating point gather the discrepancy data and complete the report. The media used for reporting is generally the SF368, especially for inter-Service PQDRs. Frequently used alternatives to the SF368 include the following:

- E-mail (mostly within the Army)
- DoD message format (mostly between the Air Force and other Services)
- Online data base (mostly within the Air Force)
- Electronic transaction (DLA depots reporting to DLA action points).

The E-mail and DoD message format are virtual equivalents of the SF368, listing the form box number and its associated data. (Appendix C presents samples of these formats, a completed PQDR, and the data to be included in the submission.) The online data base and the electronic transaction are computer processable but only to a limited number of recipients.

The reports provide information on item identification [e.g., national stock number (NSN) or manufacturer's part number], contract number, date discrepancy was discovered, quantity discrepant, and a description of the nature of the discrepancy and how it was discovered. The originating point also assigns a report control number (RCN), a unique three-part number comprising the unit's DoD activity address code, the Julian date, and a serial number. The originator then uses DLAR 4155.24 and any applicable Service regulation to determine the activity to

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[2]A survey shows that 54 percent of the Army's PQDRs come from the field, 23 percent from the depots, and 23 percent from contractors.

which the PQDR should be forwarded. The originating organization is then responsible for isolating the discrepant material and holding it pending disposition instructions from the action point.

Screening Point

Screening points were added to the process in an effort to improve the accuracy and completeness of the PQDRs that reached the action point. Generally, the Services have placed screening points at inventory control points (ICPs), which also serve as action points. The Navy is the major exception to such organization, separating its screening and action points and placing them within a variety of activities. Generally, the Navy locates its screening points closer to originating points to enable them to fill out PQDRs more readily and more accurately.

The primary purpose of the screening point is to ensure that the PQDR is filled out as completely and accurately as possible and appears to report a valid complaint. To meet those criteria, personnel at the screening point may have to obtain correct or missing data, close out invalid PQDRs, validate the criticality of the deficiency, and collect multiple reports against the same item and deficiency and consolidate them into a single PQDR.

Screening points also perform the following functions:

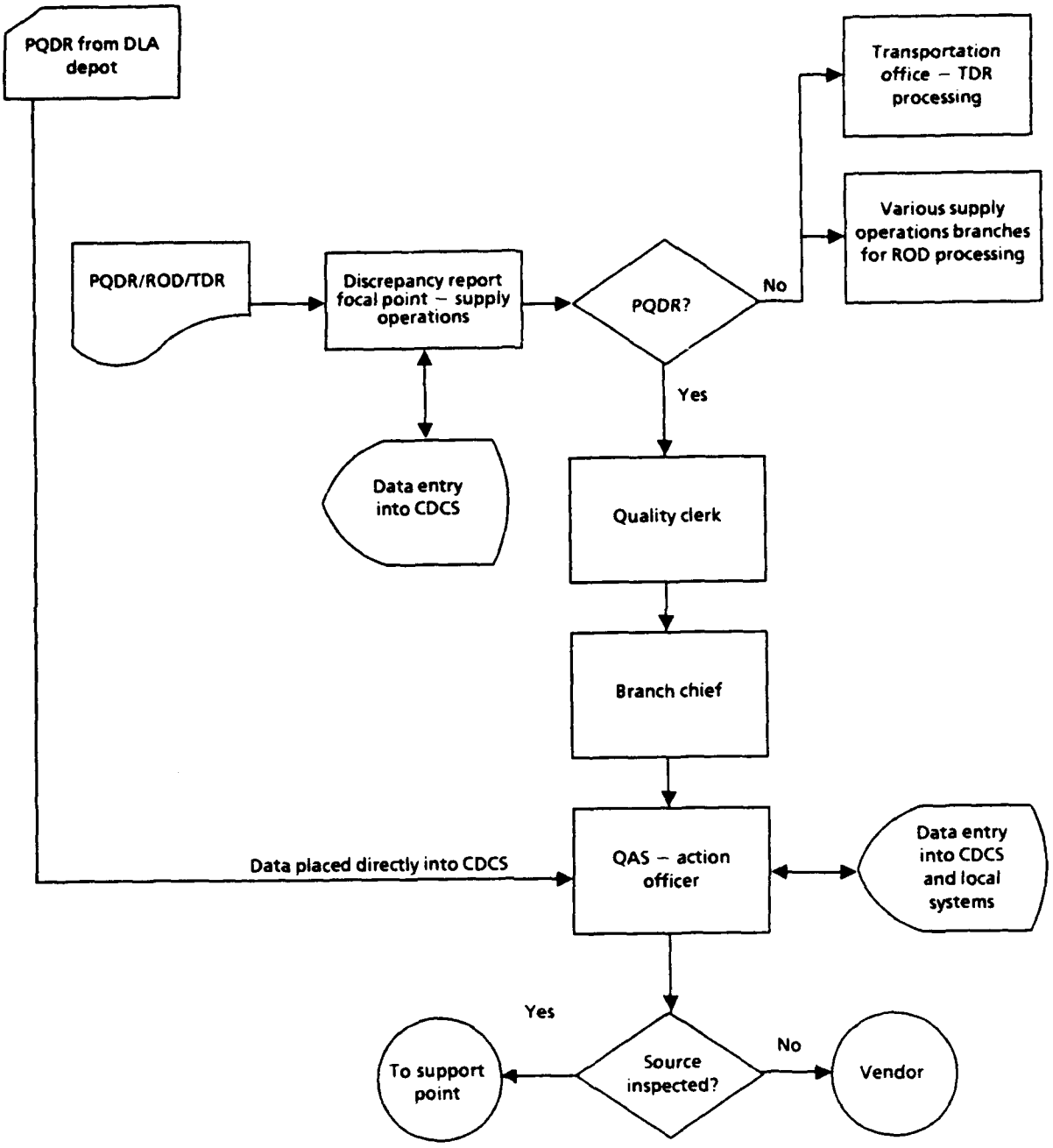
- Conduct a preliminary investigation of the discrepancy.
- Assist the action point/item manager in identifying the location of material in the supply system that must be "frozen" or returned.
- Review PQDR responses to ensure the originating Service is receiving an adequate response from the action point. They must then forward the response to all originators of that discrepancy.

When the review is complete, valid PQDRs are forwarded to the action point.

Action Point

Action points are responsible for managing the investigation that stems from the PQDR, initiating appropriate action on deficient and suspect material, coordinating with activities responsible for quality deficiencies to resolve them and prevent their future occurrence, authorizing credit when appropriate, and disseminating the results of investigations and corrective action as appropriate. An action point

typically is the ICP managing the deficient material. In the following paragraphs we use operations within DLA centers to illustrate the action point flow (see Figure 2-2).



Note: CDCS = Customer/Depot Complaint System; QAS = quality assurance specialist.

FIG. 2-2. OVERVIEW OF DLA ACTION POINT FLOW

Receipt and Review

The DLA action points receive all discrepancy reports at a central focal point in the supply operations branch. The focal point assigns a DLA control number (distinct from the RCN) and enters all discrepancy reports (PQDRs, RODs, and TDRs) into the CDCS. For PQDRs, the focal point obtains a printed requisition history for the item and attaches it to the PQDR before forwarding it to the quality clerk. The appropriate quality branch is determined by the Federal Supply Class (FSC) of the material.

Details of how PQDRs are received by the quality department vary by center but the description here represents a typical flow. A clerk obtains additional supporting information (e.g., drawings, contract, procurement history – usually in paper copy form) and provides that information and the PQDR to the branch chief. The branch chief reviews the package and assigns it to a QAS – again usually by FSC. Branch chiefs and QASs frequently use personal computers (PCs) to monitor workloads and due dates; the CDCS also monitors similar information.

Investigation

The QAS must first review the PQDR to determine whether it contains adequate information and whether it appears to reflect a true discrepancy. Because information is often missing or not clear, the QAS must frequently contact the originator for more information. The QAS must also determine whether this discrepancy is new or is identical to one that has been previously reported by another activity. In the later case if the earlier discrepancy was already investigated and closed, the QAS records the same response and closes the new one.

For a new discrepancy the next decision is to determine the following:

- Whether the material was inspected upon receipt; if it was, the action point completes the investigation.
- Whether the material was inspected at the source; if it was, the PQDR is forwarded to a support point.
- Whether the discrepancy is the result of an incorrect procurement specification; if that is the case, it is forwarded to the activity which prepared the specification or the engineering support activity.

For items inspected upon receipt (mostly DLA-managed items), the QAS performs the investigation. The nature of the investigation varies considerably, depending on the complexity of the material and the level of cooperation of the vendor. To the extent possible, the QAS determines the cause of the deficiency and the remedial measures. Additional and subsequent actions that may occur are noted in the following paragraphs.

For items inspected at the source, a copy of the PQDR is sent to the support point, typically through the U.S. Postal Service (USPS); however, facsimile (fax) machines are sometimes used. Forwarding the PQDR to the support point is recorded in the CDCS. Action points vary on what PQDRs are forwarded to the support point. While all forward the first occurrence of a valid PQDR, some action points also forward as information copies subsequent reports on the same defect.

Credit

Credit is usually given to the end user whenever the PQDR is deemed to be valid. It is not generally authorized until after the investigation is complete. The authorization of credit is recorded in the CDCS, but that is only a recording device. Depending on the action point, credit is actually provided either by forwarding signed copies of the paper PQDR to the Defense Finance and Accounting Service (DFAS) or by indicating on the closeout letter that the originator should request the credit through the supply system.

Exhibits

In some cases investigators need to see a sample of the defective material to determine the cause of the defect. This sample is called an "exhibit." A request for an exhibit is typically initiated by the vendor whose product is discrepant, but in some cases it is initiated by the QAS or Quality Assurance Representative (QAR). In any event, the request always comes through the action point. How the action point requests the exhibit has varied over time and by activity. In most cases the QAS places the request through the item manager. In the past some QASs had the authority to authorize the request. Exhibit requests are sent to the originator by all the usual means: mail, message, E-mail, fax, and data base. The originator who does not receive such a request within 60 days of reporting the discrepancy is authorized to repair or return the defective material.

Most action/support points will close a PQDR when a requested exhibit is not received within 60 days although they are lenient on this deadline if they expect to receive the item. Coordinating the exhibit arrival frequently requires numerous phone calls.

Once the vendor receives and reviews the exhibit, its disposition must be determined. The usual options are repair or replace and then return it either to the originator or to wholesale inventory. Alternatively, the item can be retained by the vendor and credit provided to the Government.

Stock Actions

In some cases, other pieces of the same equipment must be examined for the same discrepancy. This is done by requesting one or more depots to sample the material in stock. The request is usually forwarded through the item manager.

Occasionally, the entire stock of an item must be recalled from the supply system because sufficient numbers of it are believed to be discrepant. That action requires the item manager and others within the Services to locate and return the items as well as to adjust inventory and financial records. It will also typically involve the procuring office and the vendor.

Closeout and Response

When a support point completes an investigation a DLA Form 1227, *Product Quality Deficiency Investigation Report*, is returned to the action point. The action point then records the closeout status in CDCS. The action point sends a copy of the PQDR with the closeout information along with the Form 1227 and a cover letter to the screening point. The cover letter is generally completed on a PC or other word processing equipment separate from any other automation. The closeout information is sent through the USPS.

Support Points

Support points are generally Defense Contract Management Command (DCMC) area offices (DCMAOs) or DCMC plant representative offices (DPROs). They are responsible for conducting investigations of PQDRs to determine the cause and responsibility for the deficiency, recommend appropriate corrective action, and

evaluate current assets. They report the results on a Form 1227. The support point requests exhibits when it performs the investigation.

A focal point within a DCMAO receives PQDRs and determines whether they have been correctly routed (Figure 2-3). The focal point records the receipt into the Mechanization of Contract Administration Services (MOCAS) and sometimes a separate PC-based system that tracks the PQDR workload and status. Some DCMAOs generate a receipt acknowledgment to the action point. The focal point then mails the PQDR, faxes it, or uses other means to forward it to the QAR for the vendor that provided the deficient material.

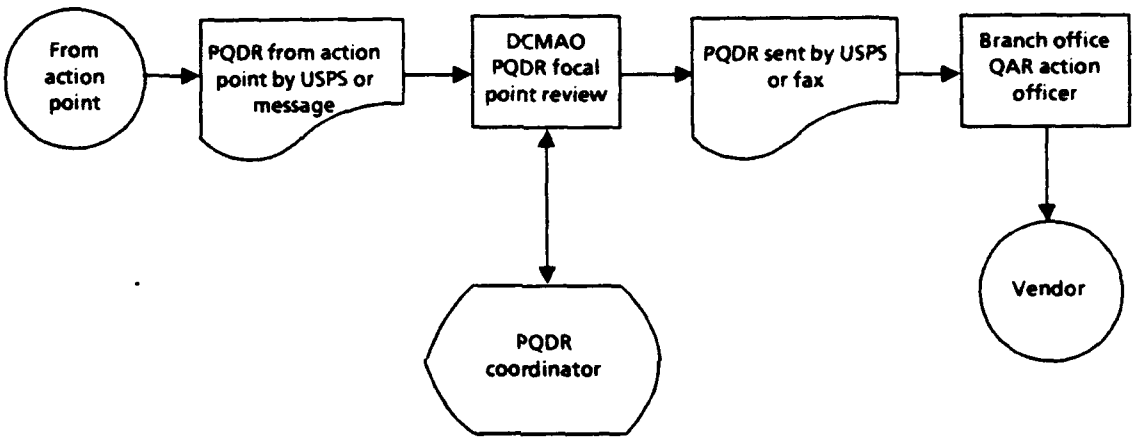


FIG. 2-3. OVERVIEW OF SUPPORT POINT FLOW

The QAR works with the vendor in conducting the investigation. The ability of the QAR to complete the investigation depends heavily on two issues:

- Willingness of the vendor to cooperate
- The ability of the vendor to investigate, based on such factors as completeness of PQDR data, availability of an exhibit, age and handling of the material, and availability of vendor records.

When the investigation is complete, the QAR completes the Form 1227 with responses recorded in text and through the nine-digit summary code as defined in DLAR 4155.24. The QAR returns the forms to the DCMAO, which records the investigation results in MOCAS and then mails the forms back to the action point.

The DPROs generally perform the same actions except that they work directly through the action point without an intervening DCMAO.

Flow Summary

Cumulatively, a PQDR processed through investigation with an exhibit will undergo approximately 15 exchanges and handlings (Figure 2-4) and require more than 100 days to process.

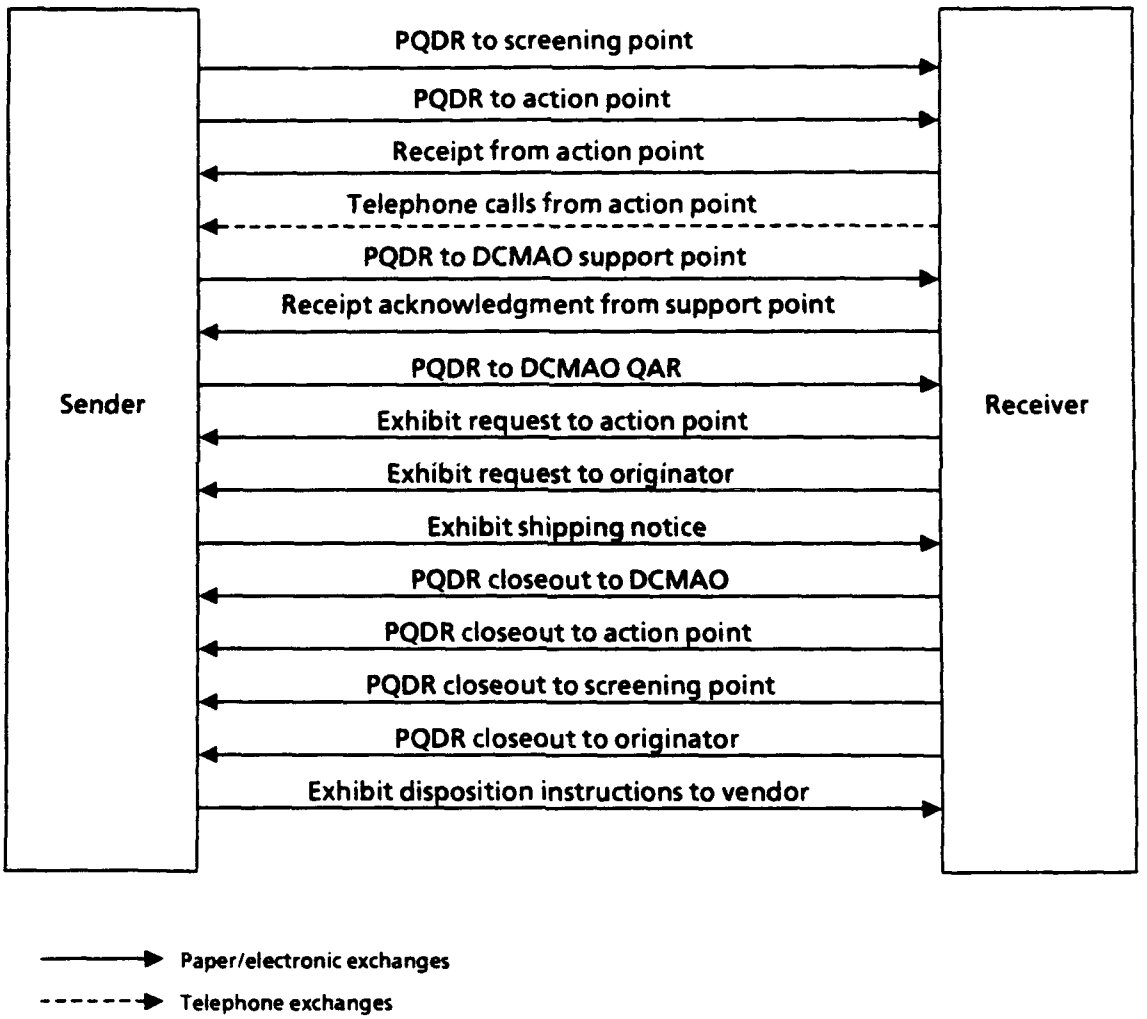


FIG. 2-4. DATA EXCHANGES OF A TYPICAL PQDR INSPECTED AT THE SOURCE

FINDINGS AND CONCLUSIONS

In our research and interviews with activities from the Military Services, DLA, and GSA, representing every node in the PQDR processing chain, we consistently observed that the process is expensive and slow. Furthermore, it may not be contributing to the goals of the program. The Navy reviewed 50,328 PQDRs closed between 1 January 1988 and 31 December 1991 and observed that less than 14 percent of the PQDRs submitted resulted in a corrective action that might contribute to improved product quality. The use of EDI in the process cannot redress all of the conditions that are causing this low percentage, but it can dramatically improve the situation by improving the quality of the submissions and reducing the time and money expended in processing them. It can also release money and other resources for commitment to other initiatives for quality improvement.

This section describes the problems that we observed and presents our conclusions. They are organized according to the applicable node (i.e., originating point, screening point, action point, support point) within the processing chain.

Originating Point

Many activities report that PQDRs are inaccurate, incomplete, or invalid. Action points must contact the originator or screening point to obtain further clarification for more than half of the PQDRs received.[3] In some cases the PQDR is incomplete or is missing vital data and cannot be processed. It is then returned to the originator. In a 1-year period Army action points returned 11 percent of the received PQDRs as incomplete or invalid. In a similar period, the Defense Industrial Supply Center (DISC) returned 18 percent of the PQDRs it received. Among the causes for return were the following:

- Inadequate identification of the item and/or applicable contract.
- Inadequate description of the discrepancy.
- Invalid submission. Examples include the item operated correctly for a significant time before failure; the item was not the appropriate one for the application; the end user is applying stricter specifications than those under which the item was procured; the end user claims a discrepancy when in fact

[3]This contact is frequently complicated by the fact that the point-of-contact information is often given for the person who submitted the form rather than the individual who discovered the discrepancy.

the item was abused or damaged by the user. The last of these problems is rare among Service users but more frequent with contractors receiving GFM items.

The DoD Inspector General (IG) further substantiates these findings in Report Number 92-099, *Quality Assurance Actions Resulting from Electronic Component Screening*, 8 June 1992. In it, the IG notes that of the 5,952 PQDRs submitted for electronic components during FY88 through FY90, only 31 percent were completely useful to contracting officers. The remaining PQDRs lacked contract numbers, contractor identification codes, or other vital data or were duplicates.

Often PQDRs are not reported quickly. Category II PQDRs received by Navy action points in 1991 averaged 40 days between discovery of the discrepancy and submission of the PQDR. That delay is attributable to two causes:

- Difficulty in obtaining the information needed to complete the PQDR.
- Priority activities taking precedence. These priority actions include completing maneuvers or operations or evaluating the impact upon construction or refit. The latter is particularly true of Navy contractors which use a great deal of GFM in ship and aircraft construction.

We conclude that completing the PQDR form presents significant difficulties to an activity that discovers a deficiency and is expected to originate a PQDR. Logic would suggest that if completing the PQDR is difficult, many potential originators will choose to avoid doing so. Consequently, quality problems are more likely to go unnoticed, possibly endangering lives and degrading readiness. To avoid that, the difficulty associated with completing a PQDR needs to be reduced or eliminated.

Screening Point

Data provided by the Navy show that Category II PQDRs received by Navy action points in 1991 averaged 26 days in a screening point. The problems identified in the previous section suggest that even with 26 days, screening points are not rectifying problems with many PQDRs. Considering the delay that screening points add to the PQDR process and the benefits that screening points contribute, we conclude that the value of the screening points as they are currently configured is questionable. We further conclude that while the responsibilities assigned to screening points are important, alternative methods for performing those

responsibilities are warranted. We believe that the use of EDI techniques and the revision of some processes constitute those alternative methods.

Action Point

Action points in many ways bear the greatest burden in discrepancy processing and are most dependent upon automation. All Services have some form of automated system for processing PQDRs at the action points. However, because of difficulty of use, inadequate access, and other factors, none is obtaining the full benefit of automation. Because of the importance of this area and its relationship to EDI, we deal with automation status in a separate section. The following subsections relate other findings associated with action points.

Levels of PQDR Processing

Apart from the distinction between a Category I and Category II PQDR and the time frames for reporting and resolving each, the regulation does not define any differences in the handling of PQDRs for material on the basis of cost, quantity, frequency of defects, potential impact on mission, criticality, useful remaining life, or any other criteria. As a result of equal treatment we believe that some PQDRs receive more attention than they should while others receive less.

Relations with Item Managers and Wholesale Depots

Quality departments need to work with item managers in a number of areas, including the following:

- Requesting, tracking, and disposing of exhibits
- Inspecting samples from wholesale inventories
- Freezing, unfreezing, and recalling assets in the wholesale and possibly the retail supply system.

In general, quality departments and item managers are not closely linked. No clear procedures, priorities, or formats have been established for working quality problems through the supply operations department. The QASs generally do not have the authority to initiate any of those actions.

The depots can play an important role in discovering discrepancies before they reach end users, in assisting action points in researching contracts and by providing

other information, and in sampling stocks as noted above. However, again, those actions suffer since no links exist between the quality organizations at the action point and those of the depots. The fact that DLA depots are using the ROD form as a PQDR in contravention of the joint regulation further suggests that the depots could be more involved in the resolution of quality deficiencies.

Using PQDR Information in Procurement Decisions

The IG report indicates inadequate use of PQDRs in making procurement decisions. DLA and the Navy incorporated PQDR information in their procurement decisions. The action point will have to determine the PQDRs to be included in such evaluations.

Assigning Credit

When the action point determines that credit should be provided to the activity that received deficient material, credit is usually authorized only after the investigation has been completed and the PQDR closed. In contrast, GSA generally provides credit when it determines that an item is defective. That determination is often made prior to the initiation or completion of an investigation since many GSA items are of a nature such that defects are readily apparent.

We believe that the recipient of deficient material is unnecessarily burdened by the withholding of credit until an investigation is completed and the PQDR is closed. As a result of this practice, a potential PQDR originator may be less inclined to submit a PQDR. Additionally, authorization of credit is either performed manually or left to the user to claim.

Centralized Operations

The GSA operates a single centralized center for receiving all discrepancies although the investigation is handled by region. DLA's supply operations group is evaluating the possibility of setting up a similar organization. That concept has many advantages as does extending it to include most action point functions. Those advantages include the following:

- Discrepancy processing will be treated as the primary mission rather than a subordinate mission within disparate organizations.

- Confusion in the user community about where to send discrepancy information will be eliminated.
- The experience level of the staff processing PQDRs will be increased and broadened, and communication with users will be improved.
- The number of participants will be reduced to the user, a QAS, and a QAR. The PQDR will be routed from the user to the center, and from the center direct to the QAR/DPRO. That flow would bypass screening points and DCMAOs in the PQDR chain.
- Exhibit handling would be expedited and exhibit control will be improved.
- Tracking and trending analysis will be improved as will coordination with procurement for the contractor evaluation system.
- The amount of technology needed to support PQDR processing and its location will be reduced (and thus the costs, too) and the opportunity to use the technology will be increased.

Support Point

The most frequently cited impediment to investigating and resolving quality deficiencies was that exhibits were not available for an investigation. Anecdotal evidence indicates that this is a significant problem, but the data we collected do not substantiate that evidence. To illustrate, the Army activities that responded to our survey show that of 9,323 valid PQDRs submitted, only 367 (4 percent) required exhibits. Of those requiring exhibits, only 27 (7 percent) were closed because the exhibit was not received. Similarly, DISC processed 2,439 valid PQDRs with only 8 percent requiring exhibits. Of those requiring exhibits, only 7.5 percent were closed because exhibits were not received.

One reason that exhibits are not received is that the priorities of the originator may conflict with the quality program in holding exhibits. The originator may consider repairing or replacing the item by any expedient means more important in support of end-item readiness. Holding exhibits can also affect the end user's stock fund and other factors as, for example, spares space on a ship. The longer it takes for the support point to request an exhibit, the greater the chance that the exhibit will not be available.

Requesting exhibits adds significantly to the time to close a PQDR. Those Category II PQDRs received by Navy action points in 1991 and requiring exhibits

took an average of 94 days for support point processing; those that did not require an exhibit took an average of 58 days.

We also observed that DCMAOs add time to the processing of any PQDRs that require the QAR to investigate the contractor responsible for deficient material. That time delay occurs because action points mail those PQDRs to the appropriate DCMAO, which then forwards them to the QAR in a branch office. The request for an exhibit is also processed through the DCMAO and then to the action point; however, that processing is normally done by telephone or fax. The QAR mails the investigation report to the DCMAO, and after it is approved, it is mailed back to the action point unless urgency requires that it be faxed.

Thus, we conclude that support point involvement in the PQDR process contributes significant, avoidable time delays in resolving PQDRs, especially when exhibits are required. We also conclude that support points stand to gain substantially as the result of the implementation of EDI and revised business practices that EDI could accommodate.

Automation

Our previously mentioned report, *The Feasibility of a Single Discrepancy Reporting System,* included an informal survey of the state of automation for discrepancy reporting.[4] We did not repeat that review in this task. However, since automation is the key to process improvement in PQDRs, we have recorded our findings of the current state of automation as determined from the interviews we conducted.

Originating Point

Little Service-wide capability exists for reporting discrepancies especially on an inter-Service basis. We found numerous local initiatives for entering data into a computer and printing an SF368 equivalent. The Air Force's INFOCEN system, an interactive data base that originators access to submit PQDRs, is an exception. Additionally, DLA depots have an automated discrepancy reporting module within the DLA Warehouse and Shipping Procedures (DWASP) system.

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[4]See footnoted citation in Chapter 1.

Action Point

Each Service has some form of automation associated with its action points.[5] DLA and the Army have modules associated with their wholesale material management systems, while the Air Force, Navy, and Marine Corps have stand-alone systems. Each system has different characteristics, capabilities, and drawbacks. In Chapter 3, we discuss the Joint Logistics Systems Center's (JLSC's) review of these applications in its effort to define a DoD-wide standard system. We do not duplicate that effort here but rather itemize in the following list functional features needed by action points but frequently not available in the current automation environment:

- Automatic entry of incoming PQDRs into the system to eliminate the need to reenter those data
- Sufficient terminals and peripherals to make access convenient to all QASs and their managers
- Sufficient user-friendliness, flexibility, and capability so that users will not feel the need to use stand-alone PC systems as alternatives to the standard system
- Capability to manage workload tracking
- Capability to manage text as well as fielded data
- Automatic receipt acknowledgment
- Convenient online and hardcopy access to related data including drawings, item nomenclature, asset balances and locations, requisition history, discrepancy history, and procurement and contract information
- Automatic linkage to the supply/accounting system for applying credit once approved
- Automatic linkages to the supply system for requesting exhibits.

Support Point

All support points are in DCMC and therefore use MOCAS. It performs the tracking functions but does not offer other enhancements such as, for example, receipt acknowledgment or advanced text capabilities.

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[5]Excluding local systems, we are not aware of any automation specific to screening points and did not concentrate on this area. In general, it should be similar to action point capabilities.

Central Data Base

Maintaining a central data base of all DoD PQDRs or a separate data base for each Service would enable personnel to obtain the status of open PQDRs, provide management information on PQDR processing; and, most important, provide trend information on vendor and item quality performance. The status of central PQDR data bases within the Services and DLA is as follows:

- All Air Force components use INFOCEN; however, individual commands maintain separate data bases within the INFOCEN structure.
- The Army discontinued funding a centralized data base. Each action point maintains its own.
- DLA established a central data base in 1992. It is automatically fed by downloads from CDCS and MOCAS. However, since CDCS loads the item by its own assigned number and MOCAS loads it by RCN, some PQDR's enter the data base twice.
- The Marine Corps system is accessible only at its ICP in Albany, Georgia.
- The Navy maintains a central PQDR database in its Product Deficiency and Evaluation Reporting Program (PEDREP) system.

SUMMARY

We believe PQDRs are a necessary and valuable component of the quality program. However, much can be done to improve the tools and the flow by which they are processed.

In Chapter 3, we describe how EDI and/or an integrated system can be applied to eliminate the expense and delays of paper processing and can link isolated systems. In Chapter 4, we recommend actions to associate the technology to changes in the business practices to gain further improvements.

CHAPTER 3

AN ELECTRONIC APPROACH

ELECTRONIC PROCESSING

In Chapter 2, we reviewed the current paper-based methodology for processing PQDRs and described some of its impacts upon the quality program. In this chapter, we describe how technology can improve the PQDR program while reducing the labor costs involved.

One technical approach to improving PQDR flow is using EDI transactions to link various application software systems. Another approach is to utilize a single system to support the entire user community. These two approaches can be used separately or in combination. The following sections review these two technologies.

ELECTRONIC DATA INTERCHANGE

Definition

Electronic data interchange is defined as

> The exchange of routine business transactions in a computer-processable format, covering such traditional applications as inquiries, planning, purchasing, acknowledgements, ... test results, shipping and receiving, invoices, payments, and financial reporting.[1]

We can characterize EDI in the following ways:

- It is a set of automated business transactions flowing between organizations.
- It relies on supporting business application software but is not itself a computer system.
- It is the process by which those transactions are linked to the application software to improve the business process.
- It is a philosophy for conducting business. It integrates business functions, is a basis for process improvement, and establishes the extended enterprise.

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[1]Data Interchange Standards Association Inc., *An Introduction to Electronic Data Interchange,* September 1991.

Several years ago, the Gartner Group, a consulting firm, identified the following attributes of commercial business processing:

- Of all computer information entry, 75 percent comes from another computer. *[Comment: That number is low for PQDRs since almost every participating activity enters data into one or more computers.]*
- For each product shipment, 14 information exchanges occur. *[Comment: As many as 15 may occur in a PQDR (see Figure 2-4).]*
- Creating and exchanging one business page costs $50 manually and $4 electronically. *[Comment: Estimates for processing PQDRs are not usually maintained but they range from $40 to $1,500.]*

Generally, EDI benefits are considered in two categories: direct and indirect. Direct benefits are those associated with eliminating the paper handling and they are as follows:

- Reduction in data entry costs
- Reduction in the need to research and correct data entry errors
- Elimination of the delays and costs associated with mailing paper forms
- Elimination of paper reproduction and storage costs.

Indirect benefits accrue from changed business practices (usually associated with automating previous manual processing). They are typically harder to identify and quantify. In many EDI applications, however, they are significantly larger than the direct savings. The following are typical indirect benefits in materiel management:

- Reduction in inventory size and handling
- Reduction in transportation costs
- Reduction in procurement costs and delays.

Defense Management Report Decision (DMRD) 941 reported expected direct savings of approximately $500,000 a year for PQDRs and indirect savings of approximately $1.5 million a year. Because of the number of activities involved and the complexity of PQDR processing, direct savings will probably be higher than that. The primary indirect savings for PQDRs will be realized by reducing the amount of time assets are frozen while under PQDR investigation. Another indirect savings

will eventually be realized by improved products being delivered to DoD. We have not attempted to quantify that amount beyond the DMRD estimates.

A National Standard for EDI

In 1978, the American National Standards Institute established the Accredited Standards Committee (ASC) X12 to define national standards for EDI. ASC X12 released the first five standards in 1983, and today more than 150 transaction sets (standards) are contained in ASC X12. Membership in ASC X12 is open to any individual or organization and includes many Federal agencies, including DoD.

The EDI standards are maintained through three annual meetings and additional committee meetings between each. The ASC X12 standards are extremely flexible in meeting data exchange requirements. However, where they do not meet the needs of a user community, X12 provides mechanisms to modify the standards to satisfy new requirements. ASC X12 is committed to respond to any legitimate business need. As such, new releases of the X12 standards published each year reflect the capabilities added in the preceding year.

It is the wide use, the functional breadth, and the flexibility of these transactions that have enabled industry to take the first steps toward an electronic environment.

Commercial EDI

In the mid-1970s the commercial transportation industry began to use electronic transmission and automation concepts to track railway cars and containers. From those beginnings, EDI has grown steadily into all areas of American and international commerce.

Retail stores are using point-of-sale data and EDI transactions to rapidly refill sold stock from warehouse inventories and thereby increase sales. Auto manufacturers use EDI in conjunction with just-in-time inventory to reduce storage and handling of parts. Shipping organizations use EDI to track equipment and specific pieces of cargo. Financial organizations use electronic funds transfers, a form of EDI. Many of these applications can also be used by DoD. Consider the following DoD example that illustrates specifically how EDI can be used to change business practices, save money, and improve operations.

The Defense General Supply Center (DGSC) a DLA ICP in Richmond, Va., manages film for DoD users. In the past, it purchased film in bulk quantities and stored it in warehouses in Richmond. A requisitioner in Europe would send a military standard requisitioning and issue procedure (MILSTRIP) requisition to DGSC, the DGSC computer would issue a materiel release order, and the film would be removed from storage, shipped by truck to an air or ocean port, and reloaded onto a plane or ship going to Germany. In Germany it would then be off-loaded and sent on to the requisitioning unit. Several years ago DGSC established a basic ordering agreement with a film manufacturer. For applicable products the requisition would go to DGSC where it would be converted to an electronic purchase order and forwarded directly to the manufacturer. The manufacturer would ship the film directly to the end user. In the case of a European requisitioner the film manufacturer would electronically notify its European plant to provide the delivery, thus eliminating the overseas shipment.

The DLA is able to save approximately $7 million annually by eliminating second destination delivery costs, warehouse handling and space, and energy charges for cold storage of film. Additionally, the time required to deliver the product to the end user is cut in half and the film has more of its shelf-life time available to the user. That example is but one instance of increasing Federal and DoD reliance on EDI to maintain productivity in a period of declining resources.

The Department of Defense and EDI

In many ways the MILSTRIP, initiated in 1962, is the earliest implementation of EDI. Computers at Service activities around the world maintain asset balances for their sites. When consumption reduces inventory to a preestablished reorder point, the computer generates a standard-format electronic requisition to an ICP. The ICP computer determines the appropriate depot to deliver the materiel and issues an electronic materiel release order. All of these actions are performed with minimal human intervention. For some 20 years after 1962, DoD extended its electronic operations to most supply operations but failed to carry it into many other business functions.

The DoD has embraced expanding use of EDI in a series of steps:

- *May 1989* – Deputy Secretary of Defense memorandum states the need to make maximum use of EDI and assigns the Assistant Secretary of Defense for Production and Logistics [ASD(P&L)] to direct implementation.
- *May 1990* – DLA was assigned responsibilities as DoD's Executive Agent (EA) for EDI. The EA is to promote and coordinate DoD's implementation of EDI. [2]
- *March 1991* – Federal Information Processing Standard (FIPS) 161 was released. It states that the ASC X12 and the United Nation's EDI for administration, commerce, and transport (EDIFACT) are the only two approved standards for Federal use of EDI.
- *November 1991* – DMRD 941 reiterates DoD's commitment to obtaining cost savings through EDI. It lists 20 paper forms, including the SF368, SF361, and the SF364, to be converted to EDI as the initial effort. It provides implementation funds and in following years reduces Service and DLA operating budgets based on the expected savings.
- *March 1992* – A memorandum of understanding between OSD, JLSC, and the Defense Distribution Systems Center (DDSC) states the DLMS X12 EDI transactions will be the basis for communication between systems developed under DoD's Corporate Information Management (CIM) program.

The Services and DLA have been active in initiating EDI programs, particularly in procurement and transportation. However, none of them has exhibited much activity in the discrepancy area. Several Services are using message formats or E-mail to eliminate mail delays. DLA depots use MILSTRIP-like formats to transmit discrepancy data to DLA action points, and the Navy is developing the automatic ROD (AUTOROD) system to use EDI to report RODs between Navy activities.

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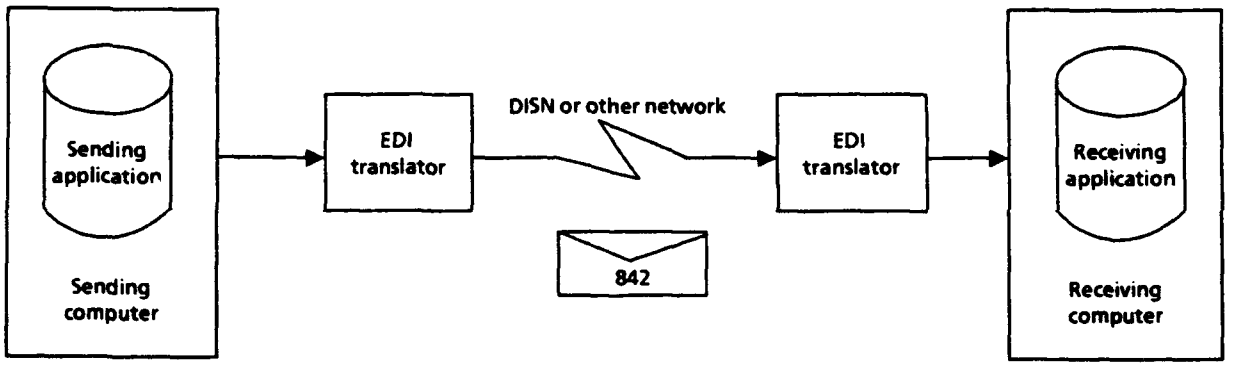
[2]The Office of the ASD(P&L) and the EA represent DoD in ASC X12. The EA is encouraging each of the Services to supply a representative. DLA does not currently have a representative, but individuals from the ICPs, DLA's Systems Automation Center (DSAC) and other organizations have been active. In particular DLMSO is very active in ASC X12, developing the DLMS, which will convert inter-Service logistics transactions (such as MILSTRIP) from fixed-length formats to the ASC X12 EDI formats.

Components of EDI

Electronic data interchange is not technically complex. To conduct EDI the following components are necessary (see Figure 3-1):

- An ASC X12 transaction set to carry the data and implementation conventions to define trading-partner usage
- Translation software (and possibly hardware) to convert the data between the application software formats and the ASC X12 EDI formats
- A telecommunications network to transmit the EDI data
- Application software to generate the data to be transmitted electronically and application software on the receiving end to process the data.



Note: DISN = Defense Information Systems Network.

FIG. 3-1. COMPONENTS FOR CONDUCTING EDI

Transaction Set

The ASC X12 standards contain the Transaction Set 842 *Nonconformance Report*. That transaction set can support PQDR data; in fact, DLMSO has already used it to carry ROD data as a part of the DLMS. Appendix A provides an implementation convention (a document used by EDI participants to define the functional data that are to be included in each field of the transaction set) that maps every field on the SF 368 and DLA form 1227 into Transaction Set 842. Appendix B contains the draft DLMS implementation convention for the ROD, which also uses Transaction Set 842.

Translation Software

Translation software converts data between the X12 transmission formats and the internal formats used by the application software system(s). Each participating activity must have access to a translator.

Translation software can reside either on the same hardware as the application system, on a separate computer at the site, or be linked by communications to a regional site. Translation software/hardware is widely available from commercial vendors for a variety of computers. Software package prices range from less than $1,000 for a PC to $35,000 for a mainframe system.

The DLA has a standard translator system in its information exchange (INX) package. It is a DSAC-developed system that provides both translation and communications support. The translation portion is provided by a commercial package from the American Business Computer (ABC) Company. INX operates on a separate computer from DLA's primary systems, typically on Gould or American Telephone and Telegraph 3B2 minicomputers. Both platforms are widely available at DLA sites.

The INX package is already operational at all DLA centers. Translation software is also available at the original DLA depots and is scheduled to be operational in 1993. The Army will install EDI capabilities into six of its former depots (now managed by DLA) in 1993. DCMC sites do not have translator support at this time.

The Navy is establishing translators on a regional basis. The Aviation Supply Office, the Fleet Maintenance Support Office, and the Ships Parts Control Center are all supported by translators. The Naval Supply Centers at Norfolk, Pensacola, San Diego, Puget Sound, and Pearl Harbor either have translators or plan to procure them. The Navy is also using the ABC translator although not the INX package.

The other Services are beginning EDI efforts that will eventually place translators at their ICPs and other activities over time.

Telecommunications

Telecommunications link activities exchanging EDI transactions. The Services and DLA have deployed telecommunications networks to link their activities.

Additionally, the Defense Data Network (DDN) connects many Service and DLA sites to one another. DoD is combining the various Service networks and DDN into an integrated network under the name of Defense Information Systems Network (DISN), which should be operational in 1994.

The extent of DISN coverage has not yet been determined. However, based on existing networks almost all DoD sites located within the United States will have access to DISN as will major overseas sites. DISN charges to users have not yet been set, but DDN current rates are as follows:

- $1.25 per 128,000 characters transmitted during peak hours (9 a.m. to 5 p.m. weekdays)
- $0.96 for the same number of characters transmitted during nonpeak hours
- $0.075 per minute for dial-up online access (for data base entry, queries etc.).

We have estimated that 75,000 PQDRs and their associated follow-up documents would cost between $1,900 (all transmitted nonpeak hours) and $2,500 (all transmitted during peak hours) annually in transmission charges. There may also be flat charges for maintaining the connection at each activity, but these would not necessarily be associated directly with PQDR processing.

Application Software

In establishing an EDI environment, the most complex and expensive component is the application software. While it is not actually a part of the EDI process, EDI cannot truly be conducted without it. The sending and receiving sites do not have to use the same software – and in most cases do not – but each must have some software. Table 3-1 summarizes the current status of Service software for discrepancy processing.

The mix of systems shown in Table 3-1 needs to be evaluated and revised as follows to support EDI:

- Determine which systems (new or legacy) will be used to support each type of activity for each Service.
- Modify the input and output routines to interface with the translator and perhaps modify other routines based on the presence of items arriving by EDI rather than data entry.

TABLE 3-1

SERVICE PQDR SOFTWARE STATUS

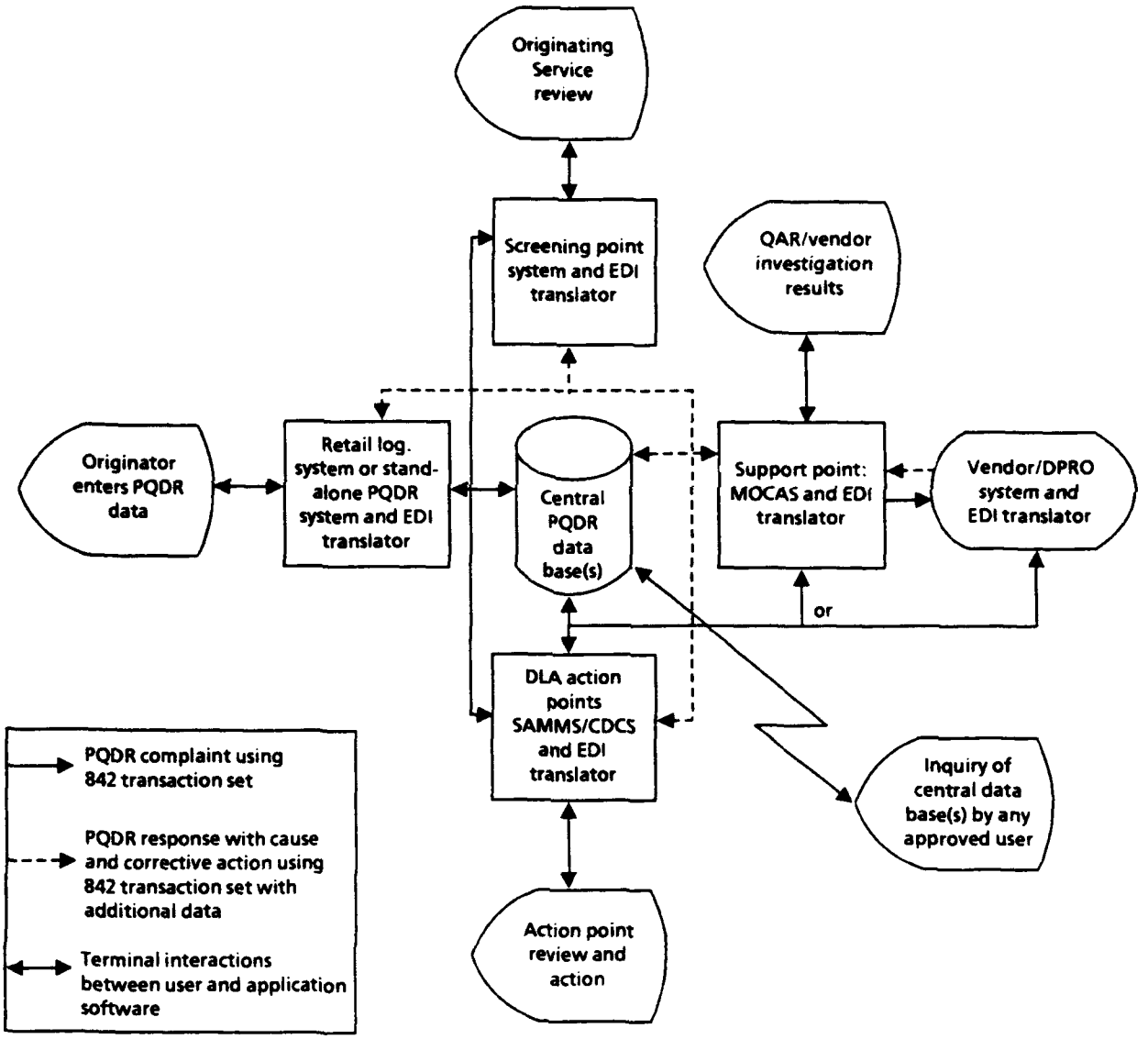
PQDR node and Service	System	Comments
Originating Point		
DLA	DWASP	A module in DLA's depot system
USAF	INFOCEN	A stand-alone system
USN	DRLOG (Deficiency Report Log)	*NOTE: This system has been selected to be the base for the CIM near term system.*
Screening Points		No standard software exists across any Service for this function. The activity may be supported by action point software.
Action Points		
DLA	CDCS	A module in DLA's material management system
USA	DRS (Discrepancy Reporting System)	A module within the Army's material management system
USAF	INFOCEN	A stand-alone data base
USMC	MCQDIS (Marine Corps Quality Deficiency Information System)	A stand-alone PC system
USN	PEDREP	A stand-alone data base
Support Points		
DLA	MOCAS	Has a discrepancy tracking module

- Revise the systems to reflect closer coordination among the Services for standardized data elements and codes for identifying the type of discrepancy and closeout response. Additional changes may also be necessary to reflect any future revision of the functional process.
- Develop or adopt a system to support PQDR initiation. That system could either be a module to supply, maintenance, and depot systems; a stand-alone; or a combination of the two.
- Revise discrepancy data to be more suitable to automated processing. Primarily that revision would entail encoding numerous text fields and check boxes. Text could accompany the codes.
- Develop trading-partner agreements that define the specifics of using EDI to exchange data.

An EDI Architecture for Discrepancy Reporting

Architecture Description

This section describes the basic structure for processing PQDRs in an EDI environment. It uses a single PQDR as an example (see Figure 3-2) to illustrate how the system would work using the current procedures.



Note: SAMMS = Standard Automated Materiel Management System. This figure illustrates a typical PQDR flow in an EDI environment. The example shows a PQDR processed by a DLA action point and forwarded to a DCMC support point. The example uses the current flow for a PQDR except that it is sent to some of the participants simultaneously rather than in sequence.

FIG. 3-2. ILLUSTRATIVE PQDR/EDI ARCHITECTURE

When a deficiency is discovered, the data would be entered into a computer rather than onto the SF368. This computer screen could be a module of the originator's Service retail asset management system, a Service maintenance system, a depot receipt processing system, or some other application software; alternatively, it could be a stand-alone system. In either case, when entered, the data would be recorded in a data base accessible to the user as needed. That data base could be local to the user or central.

Transparent to the user, the application program would feed the data to a translator, which would convert it into an 842 transaction set and transmit it to the appropriate action point. The translation and transmission could be done immediately upon the completion of the entry, or PQDRs could be held and sent overnight when telecommunication charges are usually lower.

The action point translator would receive the 842 transaction set and automatically generate a receipt acknowledgment to the originating point. The translator would convert receipt acknowledgment into the appropriate application system format. A DLA center would convert it into a CDCS format; the Army would convert it into DRS format, etc.

The PQDR would be processed at the action point. The QAS would indicate in the application software (e.g., CDCS) when it is to be forwarded to a support point. The application software (again transparent to the user) would feed data to the translator, which would transmit the 842 transaction set (with information added at the action point) to the support point.

The support point translator would send a receipt acknowledgment to the action point, convert the data into MOCAS format, and make the data available to the QAR. If the QAR was resident at a DPRO, the 842 transaction set could automatically be forwarded to that location.

When the investigation is complete, the QAR would enter into MOCAS the text and codes that describe the deficiency cause and the corrective action. MOCAS would then pass data to the translator and send the completed 842 transaction set back to the action point, screening point if applicable, and originating point simultaneously.

Summary of Advantages

While the example presented here may seem complex, it is simpler than the efforts associated with the current paper-based flow. Some of the advantages in processing PQDRs using EDI and associated software applications are as follows:

- It will eliminate paper-handling delays between and within activities.
- It will eliminate rekeying PQDR data into local systems. In the current system that rekeying occurs anywhere from three to eight times.
- It will automate receipt acknowledgement and will eliminate labor time to produce it.
- It will improve the quality of initial and subsequent inputs by utilizing computer edits, help screens, and default data and electronically providing data from associated materiel management systems (e.g., requisition and discrepancy history, technical specifications and drawings, contract numbers, and item nomenclature).
- It will improve access to current status information.

These advantages will be realized upon the initial submission of the PQDR and also upon exhibit processing, providing credit, submitting disposition instructions, and providing closeout information. Additionally, because data will be provided more accurately and quickly, the number of follow-up telephone calls and letters will decrease.

The use of EDI in this area will offer two further, more important results:

- First, because productivity will improve and valuable quality staff will be freed to concentrate on productive review and investigation.
- Second, as the system provides feedback to originators more quickly and more reliably, their confidence will improve and deficiencies will be reported more frequently.

The advantages of using EDI will contribute to improved quality in manufacturing and isolation of deficient material before it is issued to customers.

THE JOINT LOGISTICS SYSTEMS CENTER DEVELOPMENT EFFORT

DoD established the CIM initiative to reduce the number of functionally duplicative computer systems it operates. Functional area CIMs have been established for materiel management, transportation, procurement, and medical systems.

Discrepancy processing generally comes under the area of the materiel management CIM. The JLSC located in Dayton, Ohio, is responsible for developing the standard DoD logistics system to be operated by DLA and all the Military Services. The primary focus is to develop a single ICP system to replace the five existing systems.

In a parallel effort, the DDSC is developing a standard system to be used in all DLA-managed depots. That system will replace the several systems now in use. Initially, DDSC will use the Army's Area Oriented Depot-Modernization (AOD-MOD) system modified with parts of DLA's DWASP; the AOD-MOD will then be capable of electronically transmitting discrepancy data for CDCS. Initial fielding of this system is anticipated in 1993. As noted previously, the DLMS EDI transaction will be the basis for exchanging information among CIM systems.

Both of these efforts are related to PQDR processing. JLSC has identified a standard PQDR system as a near-term initiative for systems development. Over the past several months participants from all of the Services and DLA have done the following:

- Developed a general model of the discrepancy reporting process from a flow and data perspective
- Reviewed current Service and DLA systems to determine the best systems from both a functional and a technical viewpoint
- Selected the Navy's DRLOG system to be the basis for a DoD standard deficiency reporting system (DRS)
- Completed the design phase of the DRS
- Completed and distributed to the Services and DLA the DRS functional and system specification documents.

Next, JLSC, the Services, and DLA must take the following actions:

- Begin the Develop and Deploy Phase of the DoD DRS
- Reconcile the DoD DRS Function Description and System Specifications documents to insure all Services and DLA mission critical functionality is included
- Develop the DoD DRS to meet the Services and DLA requirements, as defined in the Functional Description and System Specifications documents

- Deploy the DoD DRS to a site or sites to be determined during the Develop and Deploy Phase

An Online Data Base

The JLSC currently envisages the discrepancy system as an online, interactive data base. An originator will logon to the system and enter the PQDR data into the central data base and then logoff. In the data base, a flag will be set to indicate the screening point should review the PQDR. Each day, or more frequently if desired, screening-point personnel will interrogate the data base for PQDRs. They may review the screens or print reports and update the record as necessary. When the review is complete, they will set a flag for action-point review. Similarly, action-point quality officers will interrogate the system to view PQDRs for their action. All participants in the process will use the data base to obtain the work assigned to them and trigger assignment to the next participant. Exhibits will also be requested through the data base.

Many of the details of this approach have yet to be worked out, details such as whether all PQDRs will be maintained in a single DoD data base or whether there will be a single data base file structure independently managed by each Service. The JLSC effort is planned to unify processing of both PQDRs and RODS, but, again, the specifics will be determined during the functional design phase.

SUMMARY

Utilizing either EDI or an interactive data base will be a dramatic improvement in PQDR processing over the current paper-based approach. Further, the two are not mutually exclusive. The system can be developed to receive or generate data in either format depending on the activity and/or circumstance. To illustrate, users who desire online entry or do not have access to an alternative system could use the interactive entry of discrepancy data; however, where systems exist they can use EDI. For example, DLA depots have a module that generates discrepancies on a series of 80-character records. The depots can replace these 80-character records with 842 transaction sets and process them into the data base. A discrepancy module in the Air Force's aircraft maintenance system also produces discrepancy transactions. EDI should also be used to exchange PQDR data with contractors, thus maintaining DoD's commitment to provide a single approach to electronic exchanges with industry and preventing or limiting contractor access to DoD's PQDR data base.

The first design requirement for either approach is for the PQDR system to maintain automated linkages to valuable data in the associated Service systems. The following key pieces of information must be readily and conveniently available to quality staffs:

- Item data (NSN, name, description unit price, unit pack, etc.)
- Technical specification and drawing data
- Contract history
- Requisition history and asset status
- Discrepancy history.

The second design requirement issue is to have the technology respond to the goals of the business function and to support improvements in it. In Chapter 4, we recommend changes that can be made in PQDR processing based on electronic processing rather than the paper-based system.

CHAPTER 4

RECOMMENDATIONS

Electronic data interchange is a strategic tool in DoD's efforts to improve its business processes and reduce costs. It and Computer-Aided Acquisition and Logistics Systems (CALS) are expected to be the primary communications media between DoD and industry. The DLMS as a successor to the Defense Logistics Standard Systems (DLSS) will continue to be the primary medium for inter-Service logistics transmissions including RODs.

The PQDR is identified in DMRD 941 as one of the first group of forms that should be converted to EDI, and our detailed evaluation of the PQDR functional process supports that assertion since those forms are eminently suitable for EDI processing. Converting PQDRs to EDI will improve personnel productivity, reduce the processing cycle time and operational costs and will also make PQDR processing consistent with other DoD EDI efforts.

We recommend that DLA, as the custodian of the joint regulation, work with the Military Services, initiate implementation of EDI for PQDRs. EDI should be a component of any application software whether existing systems, CIM near-term initiatives, or CIM standard systems. We recommend that DLA implement EDI cooperatively with the Services and contractors rather than independently. Although communications between DLA depots, DLA centers, and DCMC sites would benefit from independent implementation, such an approach would fail to unify them with Service/contractor originators who initiate the preponderance of PQDRs.

In our 1991 report, we recommended that the three administrating procedures for PQDRs, RODs, and TDRs should be consolidated into a single DLMS procedure. After completing our detailed investigation of the PQDR process we remain committed to that recommendation, which is consistent with JLSC's effort to integrate the three from an automation standpoint. As a part of integrating the policies, we recommend to ASD(P&L) that an OSD level sponsor be established to support the overall program.

Although EDI can be implemented to support almost any functional process, even greater benefits may be gained by revising the process. The following section recommends some alternative means that DoD should consider for processing PQDRs.

APPLYING EDI PRINCIPLES

In Chapter 3, we described the general characteristics of EDI. We noted that one was the use of EDI as a basis for changing the business practice and for establishing the *extended enterprise.* EDI is not an end in itself, but a tool to do the job better. In this chapter, we recommend a few alternative means that DoD might consider in conjunction with future systems development for processing PQDRs.

Many of the recommendations presented here emphasize the theme of the extended enterprise: to stop regarding each organization and Service in isolation but rather to integrate the end user, action point, QAR, and contractor so that they work together to make the quality program successful.

Central Processing Centers

We recommend implementing central processing centers within each of the Services and DLA or as an alternative implementing a single center for all of DoD. Figure 4-1 illustrates PQDR flow using this organization.

Improvements in the Existing Flow

Creating a central processing point creates the opportunity to alter the existing flow of PQDRs significantly. Improvements can be made in the current process either in conjunction with a central point or independent of it.

Originating Point

It has been observed that "Submitting a PQDR is a soldier's punishment for discovering something wrong." The quality program must simplify a process that is now both complex and unrewarding to the people who are expected to initiate it.

Data Entry. Providing end users with easy and convenient means for submitting PQDR data is key to encouraging the reporting of discovered discrepancies and

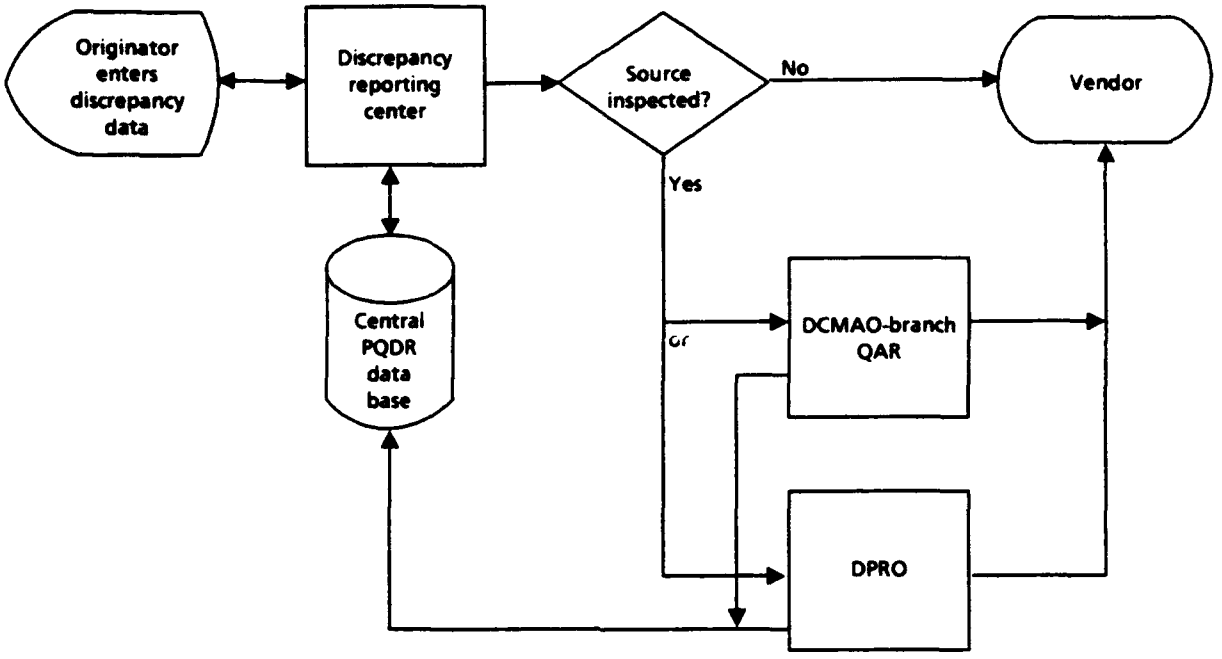


FIG. 4-1. PQDR FLOW USING DISCREPANCY CENTER AND EDI

ensuring reporting is complete and accurate. In utilizing computer input rather than a paper form, numerous features are available to assist the user:

- Default data, such as report date, next RCN, reporting unit, and point of contact (POC) information.
- Automation for loading data (available from supporting systems). Such data can include item number, nomenclature and description, unit price, unit pack, asset balances, and perhaps the critical contract number.
- A help screen to describe the requested data, where they might be obtained, and why they are important.
- Data validation edits.
- Available code display and explanation of its use. That feature allows users to select codes by highlighting or other convenient means.
- Increased POC information, including who discovered the discrepancy, who is submitting the report, and who is holding the materiel. The SF 368 does not recognize that frequently, distinct individuals and organizations serve those functions.

The data entry should be structured so that the users can enter RODs, PQDRs, or TDRs on the same screens.

Training and Communications. Improvements in training and communications would reduce the number of invalid PQDRs submitted. While any Service person or DoD civilian employee may at some point discover a deficiency and submit a PQDR, training that many individuals is not practical. However, we recommend that the Services and DLA take the following actions:

- Provide training to organizations that are more likely to encounter discrepant materiel, primarily maintenance, receiving, and quality activities. Additionally, train specialists in the supply organizations; for example, most Army installations have a Logistics Assistance Representative.
- Include quality and discrepancy processing in the Service supply management schools.
- Include articles in Service literature such as the Army's *Preventive Maintenance* Magazine.
- Associate descriptive information with the discrepancy reporting software.
- Provide hotline numbers to answer questions.
- Arrange selective visits among QARs, QASs, and user communities. For example, many contracts support specific end items operating at a limited number of sites. More rapport can be developed between those locations and their supporting quality groups.

Screening Points

We recommend that quality program management review the function of screening points to determine their role in light of the improvement that centralization and/or electronic processing will bring to the PQDR process. At a minimum, using either EDI or the data base approach, the screening point should receive an electronic copy of the PQDR at the same time as the action point. The action point should proceed unless the screening point intervenes.

Action Points

We recommend that the Services and DLA improve the level and quality of automated support to the quality action officer. While the Services provide automated tools, they are mostly from an older generation of software and lack a full complement of capabilities. We recommend the use of applications that do the following:

- Provide easy access to such related information as item data, asset data, technical data, contract status, requisition history, and discrepancy history.
- Provide ability to track workload, status of open PQDRs, and due dates.
- Improve communications capabilities and reduce administrative time consumed; use EDI and automated workload tracking equipment to reduce the time spent on typing letters and workload reports.
- Make the system sufficiently responsive and user-friendly that alternative and redundant PC or paper-based systems are not needed.
- Improve the coordination between quality groups and supply operations in requesting, tracking, and disposing of exhibits.
- Automate issuance of credit. The authorizing official should be able to enter an electronic signature and the credit should then be issued through the ICP system to the Military Standard Billing System.

Additionally, actions points must ensure that either in EDI environment or by existing means, that feedback is provided to the users. The whole quality program stands on encouraging users to report identified problems.

Support Points

The use of EDI should eliminate many of the clerical functions now performed at DCMAOs. Receipt acknowledgement will be automated, and routing to the appropriate QAR can also be automated.

Establish Different Levels of PQDR Processing

Under the current regulation, all PQDRs receive the same level of treatment. We recommend the Services and DLA give consideration to providing different levels of treatment based on such selective criteria as the following:

- Criticality of the item to the end item and criticality of the end item itself.
- Cost/complexity of item.
- Impact of deficiency upon the item: critical, major, or minor as per the IG Audit 92-099 .
- Number, nature, and dates of PQDRs previously submitted against the item. (In a broader evaluation of item reliability, data on repair and mean times to failure could also be applied.)

- Number of years the item has been in the supply system and age of deficient item.
- Issue date and condition of the specific item.
- Contract or vendor history and status.
- Quantity of items in the supply system and risk that the number of deficient items may be large.

Items deemed by these criteria to have low value in pursuing vendor evaluation should be accorded minimal processing. The PQDR should be logged in the data base and the user provided credit as appropriate and notified of the disposition. If possible these criteria and subsequent actions should be automated to minimize the labor involved. If the item exceeds the threshold of any of these criteria, more extensive investigation should proceed.

Separate Credit from Investigation

We recommend the Services and DLA evaluate the GSA approach to providing credit to the customer. They should authorize credit once it is determined that the materiel is indeed deficient. They should separate the action of issuing credit from the investigation of the *cause of the defect* whenever possible. In this situation, processing may vary on the basis of the type of materiel.

CONCLUSION

The recommendations above, are some ways in which DoD may consider improving discrepancy processing. The JLSC effort and other initiatives may suggest different recommendations. However, the most important recommendation we can make is that the Services and DLA take pains to ensure that the quality program's goals, policy, automated support, and actual processes are brought into alignment before going down new roads of technology.

The DoD policy for PQDR processing is embodied in DLAR 4155.24. However, line activities have the primary responsibilities for implementing that policy through their computer systems. We believe that DLAR 4155.24 must reflect a unified inter-Service position on DoD's goal for the Quality Program. Further, newly developed technology must in turn support the regulation in a manner that makes effective use of personnel and encourages them to use the technology.

GLOSSARY

ABC	=	American Business Computer
AOD-MOD	=	Area Oriented Depot-Modernization
ASC X12	=	Accredited Standards Committee X12
CDCS	=	Customer/Depot Complaint System
CIM	=	Corporate Information Management
DCMAO	=	Defense Contract Management Area Office
DCMC	=	Defense Contract Management Command
DDN	=	Defense Data Network
DDSC	=	Defense Distribution Systems Center
DGSC	=	Defense General Supply Center
DISC	=	Defense Industrial Supply Center
DISN	=	Defense Information System Network
DLA	=	Defense Logistics Agency
DLAR	=	Defense Logistics Agency Regulation
DLMS	=	Defense Logistics Management System
DLMSO	=	Defense Logistics Management Standards Office
DLSS	=	Defense Logistics Standard System
DMRD	=	Defense Management Report Decision
DPRO	=	Defense Plant Representative Office
DRLOG	=	Deficiency Report Log
DRS	=	Deficiency Reporting System (JLSC)
	=	Deficiency Reporting System (Army)
DWASP	=	DLA Warehouse and Shipping Procedures

EA	=	Executive Agent
EDI	=	electronic data interchange
EDIFACT	=	EDI for Administration, Commerce, and Transport
FIPS	=	Federal Information Processing Standard
FSC	=	Federal Supply Class
GFM	=	Government-furnished materiel
GSA	=	General Services Administration
ICP	=	inventory control point
IG	=	Inspector General
INFOCEN	=	information center
INX	=	information exchange
JLSC	=	Joint Logistics Systems Center
LMI	=	Logistics Management Institute
MILSTRIP	=	Military Standard Requisitioning and Issue Procedures
MOCAS	=	mechanization of contract administration services
NSN	=	national stock number
P&L	=	Production & Logistics
PC	=	personal computer
PEDREP	=	Product Quality Deficiency and Evaluation Program
POC	=	point-of-contact
PQDR	=	Product Quality Deficiency Report
QAR	=	Quality Assurance Representative
QAS	=	quality assurance specialist
RCN	=	Report Control Number
ROD	=	report of discrepancy (see SDR)
SAMMS	=	Standard Automated Materiel Management System
SDR	=	Supply Discrepancy Report (formerly ROD)

SF	=	**standard form**
TDR	=	**transportation discrepancy report**
USPS	=	**U.S. Postal Service**

APPENDIX A

PROPOSED IMPLEMENTATION CONVENTIONS FOR THE PRODUCT QUALITY DEFICIENCY REPORT

PROPOSED IMPLEMENTATION CONVENTIONS FOR THE PRODUCT QUALITY DEFICIENCY REPORT

Implementation conventions define the data to be transmitted in each field of an electronic data interchange (EDI) transaction set. They can be used by computer programmers to map the data from a populated transaction set, or standard, to a specific location within an application data base. Programmers can also use implementation conventions to identify where their applications data requirements should be carried in an EDI transaction.

This appendix provides the implementation convention for the Accredited Standards Committee X12 Transaction Set 842 as used by the Department of Defense to exchange nonconformance report-type information. The convention has been developed according to the same standard approved by the Defense Logistics Management Standards Office (DLMSO). The first part of the convention includes the Transaction Set 842 segment hierarchy, which describes the segments of the 842 Transaction Set as they appear in the ASC X12 *Standards Dictionary*. The remainder of the convention details all segments of the 842 Transaction Set by segment, providing usage characteristics, purposes, instructions, data elements, and associated data element attributes and code values.

The implementation convention was designed to enable the 842 Transaction Set to bi-directionally transmit the following two types of data associated with a Product Quality Deficiency Report (PQDR):[1]

Reports

- Original report
- Additional information
- Changed information
- Cancellation
- Follow-up
- Information copy

Responses

- Issuance of credit
- Request for additional information
- Investigative results

[1]Implementation conventions for Requests for Exhibits and Receipt Acknowledgment will be released separately from this report.

842 Nonconformance Report

This Draft Standard for Trial Use contains the format and establishes the data contents of the Nonconformance Report Transaction Set (842) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to report products and processes that do not fulfill specifications or requirements.

The Nonconformance Report Transaction Set provides the ability for the sender to report the nonconformance at the level of detail that is required. It also provides the ability to report the specific nonconformances of a component/part while identifying the assembly as the product that is in nonconformance. The Nonconformance Report Transaction Set may be used to report, initiate, or request actions related to the nonconformance being reported. Financial and accounting information is provided for reporting purposes only.

Implementation Notes

1. This transaction set may be used bi-directionally to both "report" PQDR information and transmit a "response" to a previously submitted report. Reports and responses are further subdivided into specific sub-groups.

Reports

- Initial and information only reports notify a screening or action point that deficient material exists. Information only reports are submitted when a previous transaction identifies the same deficiency.

- Additonal information reports provide additional information related to a previously submitted initial or information only report.

- Change reports provide changes to information provided in a previously submitted initial or information only report.

- Follow-up reports notify a screening or action point that no response has been received concerning a previously submitted initial or information only report.

- Report cancellation requests notify a screening or action point that a previously submitted initial or information only report should be cancelled.

Responses

- Requests for additional information responses identify additional information required to process a previously submitted initial or information only report.

- Authorization for credit responses identify a decision to provide credit for material reported in a previously submitted initial or information only report.

- Investigation report responses provide results of an investigation.

2. Multiple reports or multiple responses may be transmitted to a single activity in a single transaction set using multiple iterations of the 2/HL/010 loop. The report or response type does not change as the transaction is forwarded (with or without changes or added information) from one organization to another.

3. Any single occurrence of this transaction set is restricted to use either as a report or a response to a report. The two basic transaction types cannot be mixed within a single occurrence of this transaction set.

4. Additional information reports and change reports will only use optional segments, data elements, and codes as required to transmit additional information or changes related to a previously submitted initial or information only report.

Table 1

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
5	010	ST	Transaction Set Header	M	1	
6	020	BNR	Beginning Segment For Nonconformance Report	M	1	
N/U	030	REF	Reference Numbers	O	>1	
N/U	040	DTM	Date/Time Reference	O	>1	
N/U	050	PID	Product/Item Description	O	>1	
			LOOP ID - MEA			>1
N/U	060	MEA	Measurements	O	1	
N/U	070	DTM	Date/Time Reference	O	>1	
N/U	080	REF	Reference Numbers	O	>1	
			LOOP ID - PWK			>1
N/U	090	PWK	Paperwork	O	1	
N/U	100	REF	Reference Numbers	O	>1	
N/U	110	DTM	Date/Time Reference	O	>1	
			LOOP ID - N1			>1
8	120	N1	Name	O	1	
N/U	130	N2	Additional Name Information	O	2	
N/U	140	N3	Address Information	O	2	
N/U	150	N4	Geographic Location	O	1	
10	160	REF	Reference Numbers	O	>1	
11	170	PER	Administrative Communications Contact	O	>1	

Table 2

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
			LOOP ID - HL			>1
13	010	HL	Hierarchical Level	M	1	
15	020	LIN	Item Identification	O	1	
19	030	PID	Product/Item Description	O	>1	
N/U	040	PRS	Part Release Status	O	>1	
N/U	050	CID	Characteristic/Class ID	O	>1	
21	060	DTM	Date/Time Reference	O	>1	
23	070	REF	Reference Numbers	O	>1	
25	075	CS	Contract Summary	O	1	
N/U	076	AT	Financial Accounting	O	1	
27	080	QTY	Quantity	O	>1	
N/U	090	TMD	Test Method	O	1	

N/U	100	PSD	Physical Sample Description	O	1	
			LOOP ID - LM			>1
N/U	104	LM	Code Source Information	O	1	
N/U	105	LQ	Industry Code	M	>1	
			LOOP ID - MEA			>1
N/U	110	MEA	Measurements	O	1	
N/U	120	DTM	Date/Time Reference	O	>1	
N/U	130	REF	Reference Numbers	O	>1	
			LOOP ID - SPS			>1
N/U	140	SPS	Sampling Parameters for Summary Statistics	O	1	
N/U	150	REF	Reference Numbers	O	>1	
N/U	160	PSD	Physical Sample Description	O	1	
			LOOP ID - MEA			>1
N/U	170	MEA	Measurements	O	1	
N/U	180	DTM	Date/Time Reference	O	>1	
N/U	190	REF	Reference Numbers	O	>1	
			LOOP ID - STA			>1
N/U	200	STA	Statistics	O	1	
N/U	210	DTM	Date/Time Reference	O	>1	
N/U	220	REF	Reference Numbers	O	>1	
			LOOP ID - NCD			>1
28	230	NCD	Nonconformance Description	O	1	
29	240	NTE	Note/Special Instruction	O	>1	
30	250	DTM	Date/Time Reference	O	>1	
31	260	REF	Reference Numbers	O	>1	
32	270	QTY	Quantity	O	>1	
33	272	AT	Financial Accounting	O	>1	
34	273	AMT	Monetary Amount	O	>1	
35	274	MEA	Measurements	O	>1	
			LOOP ID - N1			>1
38	280	N1	Name	O	1	
N/U	290	N2	Additional Name Information	O	2	
N/U	300	N3	Address Information	O	2	
N/U	310	N4	Geographic Location	O	1	

N/U	320	REF	Reference Numbers	O	>1	
40	330	PER	Administrative Communications Contact	O	>1	
			LOOP ID - LM			>1
N/U	333	LM	Code Source Information	O	1	
N/U	334	LQ	Industry Code	M	>1	
			LOOP ID - NCA			>1
42	340	NCA	Nonconformance Action	O	1	
45	350	NTE	Note/Special Instruction	O	>1	
47	360	DTM	Date/Time Reference	O	>1	
48	370	REF	Reference Numbers	O	>1	
			LOOP ID - PWK			>1
N/U	380	PWK	Paperwork	O	1	
N/U	390	REF	Reference Numbers	O	>1	
N/U	400	DTM	Date/Time Reference	O	>1	
			LOOP ID - N1			>1
50	410	N1	Name	O	1	
N/U	420	N2	Additional Name Information	O	2	
N/U	430	N3	Address Information	O	2	
N/U	440	N4	Geographic Location	O	1	
N/U	450	REF	Reference Numbers	O	>1	
51	460	PER	Administrative Communications Contact	O	>1	
			LOOP ID - LM			>1
N/U	464	LM	Code Source Information	O	1	
N/U	465	LQ	Industry Code	M	>1	
53	470	SE	Transaction Set Trailer	M	1	

NOTE:

2/010 The HL levels are item, component, product characteristic, report, and serial number. Valid HL Parent-Child relationships are 1) item - component, 2) item - product characteristic, 3) component - product characteristic, 4) report - item, 5) item - serial number, and 6) component - serial number.

Segment: ST **Transaction Set Header**

Level: Header

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: *To indicate the start of a transaction set and to assign a control number*

Semantic: The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set.	M	ID	3/3
		842	X12.21 Nonconformance Report Transaction Set			
Mandatory	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9

Implementation Note:
The number is sequentially assigned by the sender within each functional group. For each functional group, the first transaction set control number will be 0001 (a minimum of four digits are required) and incremented by one for each additional transaction set within the group.

Segment: **BNR** **Beginning Segment For Nonconformance Report**

Level: Header

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the beginning of a Nonconformance Report Transaction Set.

Semantic: *1.* BNR02 is the nonconformance report identifier number.

2. BNR03 is the date that the nonconformance report was created.

3. BNR04 is the time that the nonconformance report was created.

Comment: BNR05 indicates the status or intention of the Nonconformance Report.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	BNR01	353	**Transaction Set Purpose Code** Code identifying purpose of transaction set. 00 Original ***Code Value Implementation Note:*** *Use when submitting an original report or response.*	M	ID	2/2
Mandatory	BNR02	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier. ***Implementation Note:*** *Use "Z" to meet the mandatory requirement for this data element.*	M	AN	1/30
Mandatory	BNR03	373	**Date** Date (YYMMDD). ***Implementation Note:*** *The date the transaction set is prepared.*	M	DT	6/6
Required	BNR04	337	**Time** Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959) ***Implementation Notes:*** *1. The time the transaction set is prepared.* *2. Time is expressed as the originating activity's local time in GMT.*	O	TM	4/6
Not Used	BNR05	886	**Nonconformance Report Status Code**	O	ID	2/2
Not Used	BNR06	1005	**Hierarchical Structure Code**	O	ID	4/4
Required	BNR07	640	**Transaction Type Code** Code specifying the type of transaction. DG Response	O	ID	2/2

Code Value Implementation Note:
Use is required in all responses to identify that the transaction set contains a response(s) to a report(s) of receipt of deficient material. Each iteration of the 2/HL/010 loop will identify a request for additional information, authorization for credit, or investigative results.

QD Product Quality Deficiency

Code Value Implementation Note:
Use is required in all reports to identify that the transaction set contains report type transaction(s). Each iteration of the 2/HL/010 loop will identify an initial report, an information only report, a change report, an additional information report, a followup report, or a report cancellation request.

Segment: **N1** **Name**

Level: Header

Loop: N1 **Repeat:** >1

Required

Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Implementation Note:
The 1/N1/120 loop is used to identify the organization sending a report or response, the organization(s) to receive the report or response, and, as appropriate, the organizations that serve as the originating point, the screening point, the action point, and the support point.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory			
N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M ID 2/2

41 Submitter

Code Value Implementation Note:
Use is required in initial and information only reports to indicate the organization originating the report.

91 Action Party

Code Value Implementation Note:
Use is required in initial and information only reports to indicate the organization acting as the action point.

92 Support Party

Code Value Implementation Note:
Use in initial and information only reports to indicate the organizations acting as the support point when the action point assigns and forwards the report to the support point.

FR Message From

Code Value Implementation Note:
Use is required in all reports to indicate the organization that is submitting or rerouting, as appropriate, the report to a "PK" address(es). Use is required in all responses to identify the party/organization responding to the deficiency report or forwarding the response.

PK Party to Receive Copy

Code Value Implementation Note:
Use is required in all reports and responses to indicate a single, or multiple, organization(s) designated to receive a copy.

ZQ Screening Point

Code Value Implementation Note:
Use in initial and information only reports if a screening point exists to indicate the organization acting as the screening point.

Not Used	N102	93	**Name**	C	AN	1/35
Required	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67). 10 Department of Defense Activity Address Code (DODAAC) 33 Commercial and Government Entity (CAGE) ***Code Value Implementation Note:*** *Use when the organization is a contractor not assigned a DoDAAC.*	C	ID	1/2
Required	N104	67	**Identification Code** Code identifying a party or other code.	C	AN	2/17

Segment: **REF** **Reference Numbers**

Level: Header

Loop: N1

Optional

Usage: Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Note:
Use is optional in initial and information only reports in conjunction with PER segment within each 1IN1/120 loop iteration to identify the Office Symbol Number of the specified point of contact. Segment is not used if the PER segment is not used.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	REF01	128	**Reference Number Qualifier** Code qualifying the Reference Number.	M	ID	2/2
		A6	Employee Identification Number			
			Code Value Implementation Note: *Use to indicate the Office Symbol Number or code of the specified point of contact.*			
Required	REF02	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C	AN	1/30
Not Used	REF03	352	**Description**	C	AN	1/80

Segment: PER **Administrative Communications Contact**

Level: Header

Loop: N1

Optional **Usage:** Optional

Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax: *1.* P0304 — If either PER03 or PER04 is present, then the other is required.

2. P0506 — If either PER05 or PER06 is present, then the other is required.

Implementation Note:
Use is required in initial and information only reports in conjunction with the N1 segment (i.e., N101 is code "41" or "ZQ") to identify a point of contact associated with the specified organization and to provide up to 2 communication numbers at which the point of contact can be reached.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named.	M	ID	2/2
		PU Report Preparer ***Code Value Implementation Note:*** *Use when N1 is code "41" to identify the individual associated with the originating activity who prepared the quality deficiency report(s).*			
		QM Quality Manager ***Code Value Implementation Note:*** *Use to identify the individual associated with the screening point (N1 is code "ZQ") who reviewed the report when forwarding to the action point.*			
Required PER02	93	**Name** Free-form name.	O	AN	1/35
		Implementation Note: *Use to identify the name of the individual. Do not include blank spaces or periods after initials.*			
Conditional PER03	365	**Communication Number Qualifier** Code identifying the type of communication number.	C	ID	2/2
		Implementation Note: *Use is recommended to identify the appropriate type of communications number which can be used to contact the specified point of contact.*			
		AU Defense Switched Network			
		EM Electronic Mail			
		FT Federal Telecommunications System (FTS)			
		FX Facsimile			
		IT International Telephone			
		TE Telephone			

TL Telex
TX TWX

Conditional	**PER04**	**364**	**Communication Number** Complete communications number including country or area code when applicable.	**C**	**AN**	**1/80**
Conditional	**PER05**	**365**	**Communication Number Qualifier** Code identifying the type of communication number.	**C**	**ID**	**2/2**

Implementation Note:
Use is recommended to identify an alternate, or secondary, communications number which can be used to contact the specified point of contact.

AU Defense Switched Network
EM Electronic Mail
FT Federal Telecommunications System (FTS)
FX Facsimile
IT International Telephone
TE Telephone
TL Telex
TX TWX

Conditional	**PER06**	**364**	**Communication Number** Complete communications number including country or area code when applicable.	**C**	**AN**	**1/80**

Segment: **HL** **Hierarchical Level**

Level: Detail

Loop: HL **Repeat:** >1

Mandatory

Usage: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Comments: *1.* The HL Segment is used to identify levels of detail information using a Hierarchical Structure, such as relating line item data to shipment data, and packaging data to line item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the Hierarchical ID Number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order or item level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Implementation Notes:

1. The HL segment defines the looping structure for discrepancy reporting. The only acceptable type of loop is Item (which is understood to be either a report or response based on the BNR coding). The type of report or response is defined in the LIN segment in the 2/HL/010 loop.

2. When the transaction set is used as a report, regardless of the type of report, each 2/HL/010 loop iteration is considered a "parent" loop that identifies a single report associated with an item. The 2/NCD/230 loop is used to identify one or more specific deficiencies for an item/report.

3. When the transaction set is used as a response, each 2/HL/010 loop iteration is considered a "parent" loop that identifies a single response associated with an item. The 2/NCD/230 loop is used to provide information (e.g., accounting data) necessary or pertinent to an action(s) (e.g., prepare claim) defined in the 2/NCA/340 loop. The 2/NCA/340 loop is used to identify one or more specific actions.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory			
HL01	628	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.	M AN 1/12

Implementation Note:
Use as a "counter" to distinguish between and uniquely identify the number of loop iterations cited within the transaction set. The first 2/HL/010 loop iteration will cite "1", and each subsequent loop iteration will be increased incrementally by 1.

Not Used	HL02	734	Hierarchical Parent ID Number	O	AN	1/12
Mandatory	HL03	735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure.	M	ID	1/2

I Item

Code Value Implementation Note:
Use to denote that a report or response is being provided. Both the report and response are considered to be "parent" loops.

Not Used	HL04	736	Hierarchical Child Code	O	ID	1/1

Segment: LIN Item Identification

Level: Detail

Loop: HL

Required **Usage:** Optional

Max Use: 1

Purpose: To specify basic item identification data.

Syntax: *1.* C0405 — If LIN04 is present, then LIN05 is required.

2. C0607 — If LIN06 is present, then LIN07 is required.

3. C0809 — If LIN08 is present, then LIN09 is required.

4. C1011 — If LIN10 is present, then LIN11 is required.

5. C1213 — If LIN12 is present, then LIN13 is required.

6. C1415 — If LIN14 is present, then LIN15 is required.

7. C1617 — If LIN16 is present, then LIN17 is required.

8. C1819 — If LIN18 is present, then LIN19 is required.

9. C2021 — If LIN20 is present, then LIN21 is required.

10. C2223 — If LIN22 is present, then LIN23 is required.

11. C2425 — If LIN24 is present, then LIN25 is required

12. C2627 — If LIN26 is present, then LIN27 is required.

13. C2829 — If LIN28 is present, then LIN29 is required.

14. C3031 — If LIN30 is present, then LIN31 is required.

Semantic: LIN01 is the line item identification

Comments: *1.* See the Data Dictionary for a complete list of ID's.

2. LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Implementation Notes:

1. Use the LIN segment to define the type of report or response and the deficient item in the current iteration.

2. An item is defined using data element 235/234 pairs. The first 235/234 data element pair (LIN 02/03) identifies the NSN, when available, or the manufacturer's part number if an NSN is not available. Remaining pairs (LIN 04/05, 06/07, etc.) are used to further define an item. The information need not be presented in any specific sequential order. Unless otherwise specified, multiple codes are presented within a single data element (i.e., LIN04) to identify the range of possible data requirements. When needed, use the next available combination of data element 235/234 pairs (beginning with LIN 04/05, then 06/07 etc.) to provide the necessary data.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Required LIN01	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set.	O AN 1/11

Implementation Notes:
Use one of the following letters in all reports to identify the purpose of report.

1. A - Initial PQDR submitted by an originator, or forwarded through the PQDR process by a screening point or action point (with or without additional information provided) to another activity.

2. B - Request for cancellation of a previously submitted PQDR submitted by an originator or screening point or forwarded by a screening point to another activity.

3. C - Additional information relating to a previously submitted PQDR submitted by an originator or screening point.

4. D - Information changes related to a previously submitted PQDR submitted by an originator or screening point.

5. E - Information only report when a previous PQDR was submitted for the same item and deficiency. Submitted by an originator, or forwarded through the PQDR process by a screening point or action point (with or without additional information provided) to another activity.

6. F - Follow up to a previously submitted PQDR for which no acknowledgment or response was received. Submitted or forwarded by an originator, screening point, or action point.

Use one of the following letters in all responses to identify the type of response.

7. G - Authorization for credit submitted by an action point.

8. H - Request for additional information submitted or forwarded by a screening point, action point, or support point.

9. I - Interim investigation report submitted by the investigative activity.

10. J - Final investigative report submitted by the investigative activity.

Mandatory **LIN02** **235** **Product/Service ID Qualifier** **M** **ID** **2/2**
Code identifying the type/source of the descriptive number used in Product/Service ID (234).

FS National Stock Number

Code Value Implementation Note:
Always indicate the NSN when known.

MG Manufacturer's Part Number

Code Value Implementation Note:
Use is required when an NSN is not available. Use is recommended and carried in a subsequent 235/234 pair when an NSN is available.

Mandatory **LIN03** **234** **Product/Service ID** **M** **AN** **1/30**
Identifying number for a product or service.

Optional **LIN04** **235** **Product/Service ID Qualifier** **O** **ID** **2/2**
Code identifying the type/source of the descriptive number used in Product/Service ID (234).

CN Commodity Name

Code Value Implementation Note:
Use is required in initial and information only reports to identify the nomenclature of the deficient material.

EM Equipment Identification Number

Code Value Implementation Note:
Use in initial and information only reports, when known, to identify the equipment identification code of the deficient material.

LT Lot Number

Code Value Implementation Note:
Use in initial and information only reports, when known, to identify the lot number of the deficient material.

PN Company Part Number

Code Value Implementation Note:
Use when LIN02/03 carries an NSN to identify, when known, the manufacturer's part number.

W2 Work Unit Number

Code Value Implementation Note:
Use in initial and information only reports, when known, to identify the work unit code of the deficient material.

ZB Commercial and Government Entity (CAGE) Code

Code Value Implementation Note:
Use is required in all reports and responses to identify the manufacturer when an NSN is not available and recommended when an NSN is available.

Conditional	**LIN05**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN06**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN07**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN08**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN09**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN10**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN11**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN12**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN13**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN14**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234).	**O**	**ID**	**2/2**
Conditional	**LIN15**	**234**	**Product/Service ID** Identifying number for a product or service.	**C**	**AN**	**1/30**
Optional	**LIN16**	**235**	**Product/Service ID Qualifier**	**O**	**ID**	**2/2**

			Code identifying the type/source of the descriptive number used in Product/Service ID (234).			
Conditional	LIN17	234	**Product/Service ID** Identifying number for a product or service.	C	AN	1/30
Not Used	LIN18	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN19	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN20	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN21	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN22	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN23	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN24	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN25	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN26	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN27	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN28	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN29	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN30	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN31	234	**Product/Service ID**	C	AN	1/30

Segment: **PID** **Product/Item Description**

Level: Detail

Loop: HL

Optional **Usage:** Optional

Max Use: >1

Purpose: To describe a product or process in coded or free-form format

Syntax: *1.* C0403 — If PID04 is present, then PID03 is required.

2. R0405 — At least one of PID04 or PID05 is required.

3. C0703 — If PID07 is present, then PID03 is required.

4. C0803 — If PID08 is present, then PID03 is required.

Semantic: *1.* Use PID03 to indicate the organization that publishes the code list being referred to.

2. PID04 should be used for industry-specific product description codes.

3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item. A "N" indicates it does not apply. Any other value is indeterminate.

Comments: *1.* If PID01 = "F", then PID05 is used. If PID01 = "S", then PID04 is used. If PID01 = "X", then both PID04 and PID05 are used.

2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.

3. PID07 specifies the individual code list of the agency specified in PID03.

Implementation Note:
Use is required in initial and information only reports to further classify material reported in 2/LIN/020 warranty.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	PID01	349	**Item Description Type** Code indicating the format of a description. F Free-form ***Code Value Implementation Note:*** *Use code "F".*	M	ID	1/1
Not Used	PID02	750	**Product/Process Characteristic Code**	O	ID	2/3
Not Used	PID03	559	**Agency Qualifier Code**	C	ID	2/2
Not Used	PID04	751	**Product Description Code**	C	AN	1/12
Required	PID05	352	**Description** A free-form description to clarify the related data elements and their content.	C	AN	1/80

Implementation Notes:

Use the appropriate codes to further characterize material reported in 2/LIN/020. One of the first three, second two and last three letters must be used in the sequence identified below. New, non-GFM material that is not under warranty, for example, would be identified as "AEG".

1. *A - Use to identify reported material as new material.*
2. *B - Use to identify material as repaired material.*
3. *C - Use to identify material as overhauled material.*
4. *D - Use to identify material as government furnished material (GFM) when report is submitted by a commercial activity.*
5. *E - Use to identify material as non-GFM.*
6. *F - Use to identify material as under warranty.*
7. *G - Use to identify material as not covered under a warranty.*
8. *H - Use when it is not known if material is covered under warranty.*

Not Used	PID06	752	Surface/Layer/Position Code	O	ID	2/2
Not Used	PID07	822	Source Subqualifier	O	AN	1/15
Not Used	PID08	1073	Yes/No Condition or Response Code	O	ID	1/1

Segment: **DTM** **Date/Time Reference**

Level: Detail

Loop: HL

Optional

Usage: Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Implementation Note:
Use is required in initial and information only reports and investigative report responses. Multiple repetitions are permitted to identify various dates associated with a report.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory					
DTM01	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time.	**M**	**ID**	**3/3**

009 Process

Code Value Implementation Note:
Use in initial and information only reports when the screening point process is complete and the report is forwarded to an action point. This information is added by the screening point.

050 Received

Code Value Implementation Note:
Use is required in initial and information only reports to identify the date that reported material was received.

094 Manufacture

Code Value Implementation Note:
Use in initial and information only reports to identify the date, when known, that the reported material was manufactured.

134 Ready for Inspection

Code Value Implementation Note:
Use in initial and information only reports when the action point forwards the report to the support point for investigation. This information is added by the action point..

168 Release

Code Value Implementation Note:
Use is required in initial and information only reports to identify the date that the report originator released the report.

198 Completion

Code Value Implementation Note:
Use is required in interim and final investigation report responses to identify the date of the investigation report.

214 Date of Repair/Service

Code Value Implementation Note:
Use in initial and information only reports to identify the date, when known, that the reported material was repaired.

512 Warranty Expiration

Code Value Implementation Note:
Use in initial and information only reports to identify the date, when known, that the warranty expired for the reported material.

513 Overhauled

Code Value Implementation Note:
Use in initial and information only reports to identify the date, when known, that the reported material was overhauled.

Required	DTM02	373	Date Date (YYMMDD).	C	DT	6/6
Not Used	DTM03	337	Time	C	TM	4/6
Not Used	DTM04	623	Time Code	O	ID	2/2
Not Used	DTM05	624	Century	O	NO	2/2

Segment: **REF** **Reference Numbers**

Level: Detail

Loop: HL

Required

Usage: Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Note:
The REF segment is used in all reports and responses to identify the RCN in the first repetition of the segment. Subsequent repetitions may be used to provide information associated with reported material.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory					
REF01	**128**	**Reference Number Qualifier** Code qualifying the Reference Number.	**M**	**ID**	**2/2**

89 Assembly Number

Code Value Implementation Note:
Use in initial and information only reports in conjunction with REF02 to identify, when known, the serial number of the next higher assembly associated with the reported material.

BL Government Bill of Lading

Code Value Implementation Note:
Use in initial and information only reports to identify the GBL number, when known, to control the movement to the report originator of the material being reported.

BZ Complaint Code

Code Value Implementation Note:
Use is required in initial and information only reports to identify the category, I or II, of the PQDR. REF02 will carry "I" or "II".

E9 Attachment Code

Code Value Implementation Note:
Use in investigation report responses in conjunction with REF02 to identify separately provided enclosures or attachments if applicable to an investigation report. REF02 will carry the unique identifying number of the enclosure or attachment.

IX Item Number

Code Value Implementation Note:
Use in initial and information only reports in conjunction with REF02 to identify the serial number, when known, of the end item associated with the reported material.

MJ Model Number

Code Value Implementation Note:
Use in initial and information only reports in conjunction with REF02 (if number is available) and REF03 (for description) to identify, when known, the model of the end item associated with the reported material.

NS National Stock Number

Code Value Implementation Note:
Use in initial and information only reports in conjunction with REF02 and REF03 to identify the NSN and provide a description of the next higher assembly associated with the reported material, when known.

PM Part Number

Code Value Implementation Note:
Use in initial and information only reports in conjunction with REF02 to identify, when known, the part number of the next higher assembly associated with the reported material.

QR Quality Report Number

Code Value Implementation Note:
Use is required in all reports and responses to identify the unique report control number (RCN) of the PQDR report being submitted or being referred to in any other type of report or response submission. The RCN begins with the DODAAC of the originating DoD activity, followed by the last two digits of the calendar year when the report was submitted, and a sequential four digit number starting with "0001" for the first report of each new year.

TN Transaction Reference Number

Code Value Implementation Note:
Use in initial and information only reports to identify the transaction number, when known, against which deficient material was received.

W8 Suffix

Code Value Implementation Note:
Use in initial and information only reports to identify the suffix of the transaction number, when known, against which deficient material was received.

Conditional **REF02** **127** **Reference Number** **C** **AN** **1/30**
Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.

Conditional **REF03** **352** **Description** **C** **AN** **1/80**
A free-form description to clarify the related data elements and their content.

Implementation Note:
Use when REF01 cites codes "MJ" or "NS" to identify the model name of the end item and nomenclature of the next higher assembly associated with material being reported. The description is limited to 80 characters.

Segment: CS Contract Summary
Level: Detail
Loop: HL
Optional **Usage:** Optional
Max Use: 1
Purpose: To provide information about a contract
Syntax: P0405 — If either CS04 or CS05 is present, then the other is required.
Semantic: *1.* CS09 is the permissible overage as a percentage of the total contract line item number (CLIN) quantity.

2. CS10 is the permissible shortage as a percentage of the total contract line item number (CLIN) quantity.

3. CS11 is the permissible overage dollar value specified by the contract above which discrepancy action is taken.

4. CS14 is the Unit of Measure stipulated in the contract.

5. CS15 is the contract line item number (CLIN) unit price specified in the contract.

6. CS17 conveys the Critical Application Indicator. A "Y" indicates that a Critical Application Indicator is specified in the contract. A "N" indicates that no Critical Application Indicator is specified in the contract.

7. CS18 conveys the Special Requirements Indicator. A "Y" indicates that a Special Requirements Indicator (requiring special testing and or evaluation) is specified in the contract. A "N" indicates that no Special Requirements Indicator is specified in the contract.

Comment: CS04 may be used to identify the Contract Line Item Number (CLIN) or Extended (or Exhibit) Line Item Number (ELIN).

Implementation Note:
Use in initial and information only report types to identify contract number or purchase order number associated with a material deficiency. Use CS01 or CS06, but not both.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Optional	CS01	367	**Contract Number** Contract number.	O	AN	1/30
			Implementation Note: *Use to identify, when known, the contract number that appears on the container or the purchasing or shipping document.*			
Not Used	CS02	327	**Change Order Sequence Number**	O	AN	1/8
Optional	CS03	328	**Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction.	O	AN	1/30

Implementation Note:
Use in conjunction with CS01 or CS06 to identify the call/order number associated with the contract or order number when applicable.

Not Used	CS04	128	Reference Number Qualifier	C	ID	2/2
Not Used	CS05	127	Reference Number	C	AN	1/30
Optional	CS06	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser.	O	AN	1/22

Implementation Note:
Use to identify, when known, the purchase order number that appears on the container or the purchasing or shipping document.

Not Used	CS07	560	Special Services Code	O	ID	2/10
Not Used	CS08	433	F.O.B. Point Code	O	ID	2/2
Not Used	CS09	954	Percent	O	R	1/10
Not Used	CS10	954	Percent	O	R	1/10
Not Used	CS11	782	Monetary Amount	O	R	1/15
Not Used	CS12	336	Terms Type Code	O	ID	2/2
Not Used	CS13	560	Special Services Code	O	ID	2/10
Not Used	CS14	355	Unit or Basis for Measurement Code	O	ID	2/2
Not Used	CS15	212	Unit Price	O	R	1/14
Not Used	CS16	336	Terms Type Code	O	ID	2/2
Not Used	CS17	1073	Yes/No Condition or Response Code	O	ID	1/1
Not Used	CS18	1073	Yes/No Condition or Response Code	O	ID	1/1

Segment: **QTY** Quantity

Level: Detail

Loop: HL

Optional

Usage: Optional

Max Use: >1

Purpose: To specify quantity information.

Implementation Note:
Use is required in initial and information only reports to identify the quantities associated with the material received, inspected, and in stock.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity.	M	ID	2/2
			17 Quantity on Hand ***Code Value Implementation Note:*** *Use is required to identify the quantity of material in stock.*			
			87 Quantity Received ***Code Value Implementation Note:*** *Use is required to identify the quantity of material received.*			
			AO Verified Receipts ***Code Value Implementation Note:*** *Use is required to identify the quantity of material inspected.*			
Mandatory	QTY02	380	**Quantity** Numeric value of quantity.	M	R	1/15
Not Used	QTY03	355	**Unit or Basis for Measurement Code**	O	ID	2/2

Segment: NCD **Nonconformance Description**

Level: Detail

Loop: NCD **Repeat:** >1

Required **Usage:** Optional

Max Use: 1

Purpose: To describe the nonconformance condition.

Syntax: **R0102** — At least one of NCD01 or NCD02 is required.

Implementation Notes:

1. Use the 2/NCD/230 loop in all reports to describe a single or multiple deficiencies.

2. Use the 2/NCD/230 loop in all responses to provide information necessary or pertinent to an action(s).

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Not Used	NCD01	936	**Measurement Attribute Code**	C	ID	2/2
Required	NCD02	888	**Nonconformance Determination Code** Code indicating whether a nonconforming condition was the reason for submitting or the basis upon which a nonconformance report is initiated. Y Was a Reason for the Nonconformance Report ***Code Value Implementation Note:*** *Use to indicate the deficiency was the reason for the report.*	C	ID	1/1
Not Used	NCD03	350	**Assigned Identification**	O	AN	1/11
Not Used	NCD04	750	**Product/Process Characteristic Code**	O	ID	2/3
Not Used	NCD05	559	**Agency Qualifier Code**	O	ID	2/2
Not Used	NCD06	751	**Product Description Code**	O	AN	1/12
Not Used	NCD07	352	**Description**	O	AN	1/80

Segment: NTE Note/Special Instruction

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Comment: The NTE segment permits free-form information/data which,under ANSI X12 standard implementations, is not machine processable. The use of the "NTE" segment should therefore be avoided, if at all possible, in an automated environment.

Implementation Note:
Use of the NTE segment is required in initial and information only reports and investigation report responses to provide narrative details related to the deficiency.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Required	NTE01	363	**Note Reference Code** Code identifying the functional area or purpose for which the note applies.	C	ID	3/3
		DGN	Diagnosis Description			
			Code Value Implementation Note: *Use is required in interim and final investigation report responses to identify the cause of the deficiency.*			
		NCD	Nonconformance Specification			
			Code Value Implementation Note: *Use is required in initial and information only reports to identify the deficiency.*			
Mandatory	NTE02	3	**Free Form Message** Free-form text.	M	AN	1/60

Segment: **DTM** **Date/Time Reference**

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Implementation Note:
Use is required in initial and information only reports to identify date that the deficiency was discovered.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time.	M	ID	3/3
		516	Discovered			
Required	DTM02	373	**Date** Date (YYMMDD).	C	DT	6/6
Not Used	DTM03	337	**Time**	C	TM	4/6
Not Used	DTM04	623	**Time Code**	O	ID	2/2
Not Used	DTM05	624	**Century**	O	N0	2/2

Segment: **REF** **Reference Numbers**
Level: Detail
Loop: NCD
Optional **Usage:** Optional
Max Use: >1
Purpose: To specify identifying numbers.
Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Notes:
1. Use in investigation report responses, when applicable, to identify correspondence and communications being answered or pertinent to the reported deficiency.

2. Use in initial and information only reports to identify serial number(s) of deficient material.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory **REF01**	**128**	**Reference Number Qualifier** Code qualifying the Reference Number. **FI** File Identifier ***Code Value Implementation Note:*** *Use in investigation report responses in conjunction with REF03 to identify the name, date, subject and contents of communications being answered or pertinent to the reported deficiency Multiple repetitions of the REF segment are permitted.* **Q4** Prior Identifier Number ***Code Value Implementation Note:*** *Use in investigation report responses in conjunction with REF02 to identify the unique correspondence identification number of prior correspondence being answered or pertinent to the reported deficiency.* **SE** Serial Number ***Code Value Implementation Note:*** *Use in initial and information only reports to identify the serial number(s), when known, of the deficient material.*	**M**	**ID**	**2/2**
Conditional **REF02**	**127**	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**C**	**AN**	**1/30**
Conditional **REF03**	**352**	**Description** A free-form description to clarify the related data elements and their content.	**C**	**AN**	**1/80**

Segment: QTY Quantity

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify quantity information.

Implementation Note:
Use in initial and information only reports to identify the quantity of the deficient material and the operating time of the material before it failed.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity.	M	ID	2/2
			86 Nonconformance Quantity			
			Code Value Implementation Note: *Use is required to identify the quantity of deficient material.*			
			OT Number of Operating Periods at Failure			
			Code Value Implementation Note: *Use to identify, when known, the quantity of operating periods at the time of failure.*			
Mandatory	QTY02	380	**Quantity** Numeric value of quantity.	M	R	1/15
Optional	QTY03	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2

Implementation Note:
Use appropriate code to define the interval between failures when QTY01 is "OT".

03 Seconds
DA Days
DH Miles
HR Hours
MJ Minutes
MO Months
WK Week
YR Years

Segment: **AT** **Financial Accounting**

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To transmit financial accounting data

Comment: AT09 identifies unique local activity financial accounting information

Implementation Note:

Use is required in authorization for credit responses to identify the fund code for the appropriation to be credited for the deficient material.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Optional	AT01	1281	**Fund Code** Code identifying a specific appropriation or fund account to be charged or credited	O	ID	2/2
Not Used	AT02	1282	**Treasury Symbol Number**	O	AN	7/21
Not Used	AT03	1283	**Budget Activity Number**	O	AN	1/16
Not Used	AT04	1284	**Object Class Number**	O	AN	3/12
Not Used	AT05	1285	**Reimbursable Source Number**	O	AN	1/3
Not Used	AT06	1286	**Transaction Reference Number**	O	AN	4/20
Not Used	AT07	1287	**Accountable Station Number**	O	AN	3/8
Not Used	AT08	1288	**Paying Station Number**	O	AN	8/14
Not Used	AT09	352	**Description**	O	AN	1/80

Segment: AMT Monetary Amount

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To indicate the total monetary amount.

Implementation Notes:

1. Use in initial and information only reports to identify the unit cost and estimated cost to repair the deficiency.

2. Use is required in authorization for credit responses to identify the amount to be credited.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	AMT01	522	**Amount Qualifier Code** Code to qualify amount	M	ID	1/2
			B Estimated ***Code Value Implementation Note:*** *Use in initial and information only reports, when known, to identify the estimated cost to repair the deficiency.*			
			E Estimated Credit ***Code Value Implementation Note:*** *Use is required in authorization for credit responses to identify the amount of credit to be provided.*			
			Z3 Unit Cost Discrepant Material ***Code Value Implementation Note:*** *Use in initial and information reports, when known, to identify the unit cost of the deficient material.*			
Mandatory	AMT02	782	**Monetary Amount** Monetary amount. ***Implementation Note:*** *Cost is provided in whole (i.e., no decimal points), positive, U.S. dollars without a preceding $ or + sign.*	M	R	1/15

Segment: **MEA** **Measurements**

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights

(See Figures Appendix for example of use of C001.)

Syntax: *1.* R03050608 — At least one of MEA03, MEA05, MEA06 or MEA08 is required.

2. C0304 — If MEA03 is present, then MEA04 is required.

3. C0504 — If MEA05 is present, then MEA04 is required.

4. C0604 — If MEA06 is present, then MEA04 is required.

5. L07030506 — If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 are required.

6. E0803 — Only one of MEA08 or MEA03 may be present.

Semantic: MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comment: When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Implementation Note:
Use of the MEA segment is optional in initial and information only reports and investigation report responses to provide further detailed measurement data related to the deficiency. Multiple repetitions are permitted to identify various measurements associated with a defect or test results.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Required **MEA01**	737	**Measurement Reference ID Code** Code identifying the broad category to which a measurement applies	O ID 2/2
		DE Defects	
		Code Value Implementation Note: *Use to identify measurements associated with the deficiency.*	
		TR Test Results	
		Code Value Implementation Note: *Use to identify measurements associated with a test of the deficient material.*	
Required **MEA02**	738	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	O ID 1/3
		Implementation Note: *Use to identify the specific dimension/measurement that will be quantified in MEA03 and MEA04.*	

DI Diameter
DN Density
DP Depth
FQ Frequency
G Gross Weight
GL Gloss
HT Height
ID Inside Diameter
LN Length
LPR Line Pressure
MD Measurement Voltage
OD Outside Diameter
PB Pressure
TF Tensile
TH Thickness
UCB Cube
VO Voltage
VOL Volume
WD Width
WT Weight

Required | **MEA03** | **739** | **Measurement Value** | **C** | **R** | **1/10**
The value of the measurement.

Required | **MEA04** | **355** | **Unit or Basis for Measurement Code** | **C** | **ID** | **2/2**
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Implementation Note:
Use, as required, to identify the value of the units expressed in MEA03. For example, if the height of the nonstandard material was six feet, MEA03 would cite "6" and MEA04 would cite "FT".

2G Volts (Alternating Current)
2H Volts (Direct Current)
2I British Thermal Units (BTUs) Per Hour
2N Decibels
70 Volt
82 Ohm
AD Bytes
AZ British Thermal Units (BTUs) per Pound
B0 British Thermal Units (BTUs) per Cubic Foot
B7 Cycles
CI Cubic Inches
CM Centimeter
CR Cubic Meter
CY Cubic Yard
FT Foot
GA Gallon
HJ Horsepower

			IN	Inch			
			LB	Pound			
			MR	Meter			
			OZ	Ounce - Av			
			P1	Percent			
			P2	Pounds per Foot			
			PT	Pint			
			QT	Quart			
			R4	Calorie			
			SF	Square Foot			
			SM	Square Meter			
			SY	Square Yard			
			TG	Gross Ton			
			TN	Net Ton (2,000 LB).			
			VT	Voltage			
			WT	Wattage			
			YD	Yard			
Not Used		MEA05	740	Range Minimum	C	R	1/10
Not Used		MEA06	741	Range Maximum	C	R	1/10
Not Used		MEA07	935	Measurement Significance Code	O	ID	2/2
Not Used		MEA08	936	Measurement Attribute Code	C	ID	2/2
Not Used		MEA09	752	Surface/Layer/Position Code	O	ID	2/2
Not Used		MEA10	1373	Measurement Method or Device	C	ID	2/4

Segment: **N1** **Name**

Level: Detail

Loop: N1 **Repeat:** >1

Optional **Usage:** Optional

Max Use: 1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Implementation Note:
Use is required in initial and information only reports and optional in investigation report responses to identify various organizations associated with the deficient material.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M ID 2/2
			30 Service Supplier	
			Code Value Implementation Note: *Use in initial and information only reports and interim and final investigation report responses, when the material is not new, to identify the organization that last repaired or overhauled the material.*	
			L1 Inspection Location	
			Code Value Implementation Note: *Use is required in initial and information only reports to identify the organization that discovered the deficiency. Use in conjunction with the PER segment to identify the individual that discovered the deficiency.*	
			LG Location of Goods	
			Code Value Implementation Note: *Use is required in initial and information only reports to identify the location of deficient material. Use in conjunction with the PER segment to identify the individual who is holding the material.*	
			SH Shipper	
			Code Value Implementation Note: *Use in initial and information only reports to identify the shipper of deficient material when different from manufacturer.*	
Not Used	N102	93	**Name**	C AN 1/35
Required	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67).	C ID 1/2
			10 Department of Defense Activity Address Code (DODAAC)	
			33 Commercial and Government Entity (CAGE)	

Required	N104	67	**Identification Code** Code identifying a party or other code.	C	AN	2/17

Segment: **PER** **Administrative Communications Contact**

Level: Detail

Loop: N1

Optional **Usage:** Optional

Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax: *1.* P0304 — If either PER03 or PER04 is present, then the other is required.

2. P0506 — If either PER05 or PER06 is present, then the other is required.

Implementation Note:
Use is required in initial and information only reports to identify a point of contact associated with a specified organization and to provide up to 2 communication numbers at which the point of contact can be reached.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named.	M	ID	2/2
		IC Information Contact ***Code Value Implementation Note:*** *Use when N1 is code "L1" to identify the individual who discovered the deficiency.*			
		RP Responsible Person ***Code Value Implementation Note:*** *Use when N1 is code "LG" to identify the individual who is accountable for the materiel being held.*			
Required PER02	93	**Name** Free-form name.	O	AN	1/35
		Implementation Note: *Use to identify the name of the individual. Do not include blank spaces or periods after initials.*			
Conditional PER03	365	**Communication Number Qualifier** Code identifying the type of communication number.	C	ID	2/2
		Implementation Note: *Use is recommended to identify the appropriate type of communications number which can be used to contact the specified point of contact.*			
		AU Defense Switched Network			
		EM Electronic Mail			
		FT Federal Telecommunications System (FTS)			
		FX Facsimile			
		IT International Telephone			
		TE Telephone			
		TL Telex			
		TX TWX			

Conditional	PER04	364	**Communication Number** Complete communications number including country or area code when applicable.	C	AN	1/80
Conditional	PER05	365	**Communication Number Qualifier** Code identifying the type of communication number.	C	ID	2/2

Implementation Note:
Use is recommended to identify the appropriate type of communications number which can be used to contact the specified point of contact.

AU Defense Switched Network
EM Electronic Mail
FT Federal Telecommunications System (FTS)
FX Facsimile
IT International Telephone
TE Telephone
TL Telex
TX TWX

Conditional	PER06	364	**Communication Number** Complete communications number including country or area code when applicable.	C	AN	1/80

Segment: **NCA** **Nonconformance Action**

Level: Detail

Loop: NCA **Repeat:** >1

Optional

Usage: Optional

Max Use: 1

Purpose: To specify the action that is to be taken in response to a nonconformance condition.

Syntax: *1.* R0203 — At least one of NCA02 or NCA03 is required.

2. P0405 — If either NCA04 or NCA05 is present, then the other is required.

Semantic: NCA03 describes the action that is to be undertaken.

Comment: NCA04 is used to specify the quantity that is associated with NCA02 or NCA03.

Implementation Notes:

1. Use of the 2/NCA/340 loop is required in initial, followup, and information only reports to indicate the action taken or desired with respect to the report identified in 2/REF/070 or the material identified in 2/LIN/020.

2. Use of the 2/NCA/340 loop is required in all responses to identify the action to be taken with respect to the report identified in 2/REF/070 or the material identified in 2/LIN/020.

3. Multiple iterations of the 2/NCA/340 loop are permitted to identify several actions.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES

Required

NCA01 **350** **Assigned Identification** **O AN 1/11**
Alphanumeric characters assigned for differentiation within a transaction set.

Implementation Notes:

Use the appropriate code to qualify the action identified in NCA02.

1. A - The action is being taken. Use in reports only.

2. B - The action has been taken. Use in reports only.

3. C - The action is desired to be taken. Use in reports only.

4. D - The action is to be taken. Use in responses only.

Required

NCA02 **887** **Nonconformance Resultant Response Code** **C ID 1/2**
Code identifying a response that is the result of a nonconformance situation.

FR Follow-up Report Request

Code Value Implementation Note:

Use in followup reports to indicate that no response to a previously submitted report has been received and a response action is desired to be taken.

HE Hold Exhibit

Code Value Implementation Note:

Use in initial and information only reports when material is being or desired to be held. The amount of time to be held is identified in NCA04/05.

IN Investigate Deficiency

Code Value Implementation Note:
Use in initial and information reports when material has been or is desired to be released for investigation.

P Prepare Claim

Code Value Implementation Note:
Use in authorization for credit responses when credit is authorized and a claim should be processed using the accounting information provided in 2/NCD/230 loop.

RE Reevaluate

Code Value Implementation Note:
Use in investigation report responses when remarks and recommendations as a result of the investigation (identified in 2/NTE/350) should be taken into consideration.

RP Repair

Code Value Implementation Note:
Use in initial and information only reports to indicate that the material has been or is desired to be repaired.

RS Response Requirements Follow

Code Value Implementation Note:
Use in request for additional information responses to request that additional information be provided.

RT Return

Code Value Implementation Note:
Use in initial and information only reports when material has been or is desired to be returned to stock.

SC Scrap

Code Value Implementation Note:
Use in initial and information reports when material has been or is desired to be disposed of.

Not Used **NCA03 352 Description** C AN 1/80

Conditional **NCA04 380 Quantity** C R 1/15
Numeric value of quantity.

Implementation Note:
Use when NCA02 is code "HE" to indicate the number of days that the exhibit is being or is desired to be held. Use when NCA02 is code "IN", "RP", "RT", or "SC" to indicate the quantity of material that the action applies to.

Conditional **NCA05 355 Unit or Basis for Measurement Code** C ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Implementation Note:
Use an appropriate code when NCA02 is code "IN", "RP", "RT", or "SC".

17 100 Pound Drum
18 55 Gallon Drum
26 Actual Tons
BD Bundle
BF Board Feet
BG Bag
BL Block
BM Bolt

BO Bottle
BR Barrel
BU Bushel
BX Box
CH Container
CN Can
CT Carton
CX Coil
DZ Dozen
EA Each
GA Gallon
GR Gram
GS Gross
LB Pound
MP Metric Ton
NS Short Ton
PC Piece
PF Pallet (Lift)
PH Pack (PAK)
PR Pair
RL Roll
SE Section
SH Sheet
SL Sleeve
TB Tube
TY Tray
UN Unit

Use when NCA02 is code "HE".

DA Days

Segment: NTE Note/Special Instruction

Level: Detail

Loop: NCA

Optional **Usage:** Optional

Max Use: >1

Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Comment: The NTE segment permits free-form information/data which,under ANSI X12 standard implementations, is not machine processable. The use of the "NTE" segment should therefore be avoided, if at all possible, in an automated environment.

Implementation Note:
Use is required in initial and information only reports and investigation report responses to identify the findings and recommendations of the investigation, action taken, results of depot surveillance, evaluation of current production, and the contractor's position. Multiple repetitions are permitted.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Required NTE01	363	**Note Reference Code** Code identifying the functional area or purpose for which the note applies.	O ID 3/3

ACT Action

Code Value Implementation Note:
Use is required in initial and information only reports to identify the action taken to resolve the complaint. Use is required in investigation report responses to identify corrective action taken by the contractor.

CER Certification Narrative

Code Value Implementation Note:
Use is required in investigation report responses to identify actions taken by the Government to verify corrective action taken by the contractor.

DOD Description of Damage

Code Value Implementation Note:
Use is required in investigation report responses to identify whether the deficiency exists in current productions, in current production of similar items, or in the material in stock.

MFG Manufacturing Instructions

Code Value Implementation Note:
Use is required in investigation report responses to identify the condition of the exhibit and the contractor's position with respect to repair or replacement.

NCD Nonconformance Specification

Code Value Implementation Note:
Use is required in initial and information only reports to identify the findings of the complaint.

REC Recommendation

Code Value Implementation Note:
Use is required in initial and information only reports to identify the recommendations for resolution of the complaint. Use is required in investigation report responses to identify remarks and/or recommendations.

TRS Quality Information

Code Value Implementation Note:
Use is required in initial and informatio only reports to show results of depot surveillance and planned action.

Mandatory	**NTE02**	**3**	**Free Form Message** Free-form text.	**M**	**AN**	**1/60**

Segment: **DTM** **Date/Time Reference**

Level: Detail

Loop: NCA

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Implementation Note:
Use in investigation report responses and credit authorization responses to identify associated dates.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time.	M	ID	3/3
		128	Replacement Effective ***Code Value Implementation Note:*** *Use in investigation report responses when the contractor has agreed to repair or replace deficient material to indicate the date by which the contractor agrees to accomplish that action.*			
		188	Credit Advice ***Code Value Implementation Note:*** *Use is required in a credit authorization response to indicate the date that credit was authorized.*			
Required	DTM02	373	**Date** Date (YYMMDD).	C	DT	6/6
Not Used	DTM03	337	**Time**	C	TM	4/6
Not Used	DTM04	623	**Time Code**	O	ID	2/2
Not Used	DTM05	624	**Century**	O	N0	2/2

Segment: **REF** **Reference Numbers**

Level: Detail

Loop: NCA

Optional

Usage: Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Notes:

1. Use is required in a request for additional information response to identify the additional information required. Repeat multiple times to identify each item of additional information required.

2. Use is optional in investigation report responses to identify the investigation summary code.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
REF01	**128**	**Reference Number Qualifier** Code qualifying the Reference Number.	**M**	**ID**	**2/2**
		IX Item Number ***Code Value Implementation Note:*** *Use in request for additional information responses.*			
		NN Nonconformance Report Number ***Code Value Implementation Note:*** *Use in investigation report response to identify the nine digit investigation summary code.*			
REF02	**127**	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**C**	**AN**	**1/30**

Mandatory

Conditional

Implementation Notes:

Use appropriate code(s) when REF01 is code "IX" to identify additional information requirements. Use REF03 to further qualify the information required.

1. A. Originator's DoDAAC

2. B. Originator's point of contact

3. C. Screening point's DoDAAC

4. D. Screening point's point of contact

5. E. NSN of the deficient material

6. F. Manufacturer

7. G. Repair or overhaul activity

8. H. Contract number

9. I. Purchase order number

10. J. Requisition number

11. K. GBL number

12. L. Nature of item (new, repaired or overhauled)

13. *M. Type of material (Government furnished or contractor furnished)*
14. *N. Quantity received*
15. *O. Quantity inspected*
16. *P. Quantity deficient*
17. *Q. Quantity in stock*
18. *R. End item description*
19. *S. End item serial number*
20. *T. Next higher assembly NSN*
21. *U. Next higher assembly nomenclature*
22. *V. Next higher assembly part number*
23. *W. Next higher assembly serial number*
24. *X. Unit cost*
25. *Y. Estimated repair cost*
26. *Z. Status of warranty (active, expired, not applicable, unknown)*
27. *AA. Warranty expiration date*
28. *AB. Work unit code*
29. *AC. EIC*
30. *AD. Description of deficiency*
31. *AE. Location of deficient material*
32. *AF. Action taken*
33. *AG. Action desired*
34. *AH. Results of depot surveillance*
35. *AJ. Findings of investigation*
36. *AJ. Recommendations of investigation*
37. *AK. Other*

Use the nine digit summary code when REF01 is code "NN".

Conditional

REF03 352 Description **C AN 1/80**
A free-form description to clarify the related data elements and their content.

Implementation Note:
Use is required when REF02 is "AK" to specify the additional information required. Use is optional in all other cases to further qualify the information required.

Segment: **N1** **Name**

Level: Detail

Loop: N1 **Repeat:** >1

Optional **Usage:** Optional

Max Use: 1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Implementation Notes:

1. The 2/N1/410 loop is used in initial and information only reports to identify the action point quality assurance specialist with responsibility for resolving the deficiency. This information is added by the action point when forwarding the report to a support point.

2. The 2/N1/410 loop is used in investigation report responses to identify support point personnel associated with the investigation report.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M	ID	2/2
			KA Item Manager			
			Code Value Implementation Note: *Use is required in initial and information only reports to identify quality assurance specialist.*			
			ZR Validating Party			
			Code Value Implementation Note: *Use is required in investigation report responses to identify the support point. Use in conjunction with three repetitions of the PER segment to identify the individuals that prepared the investigation report, reviewed it, and approved it.*			
Not Used	N102	93	**Name**	C	AN	1/35
Required	N103	66	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67).	C	ID	1/2
			10 Department of Defense Activity Address Code (DODAAC)			
			33 Commercial and Government Entity (CAGE)			
Required	N104	67	**Identification Code** Code identifying a party or other code.	C	AN	2/17

Segment: **PER** Administrative Communications Contact

Level: Detail

Loop: N1

Optional **Usage:** Optional

Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax: *1.* P0304 — If either PER03 or PER04 is present, then the other is required.

2. P0506 — If either PER05 or PER06 is present, then the other is required.

Implementation Notes:

1. Use is required in initial and information only reports to identify quality assurance specialist.

2. Use is required in investigation report responses to identify the individuals that prepared the investigation report, reviewed it, and approved it.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory **PER01**	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named. **AU** Report Authorizer ***Code Value Implementation Note:*** *Use when N1 is code "ZR" to identify the individual who approved the investigation report.* **PU** Report Preparer ***Code Value Implementation Note:*** *Use when N1 is code "ZR" to identify the individual who prepared the investigation report.* **QM** Quality Manager ***Code Value Implementation Note:*** *Use when N1 is code "ZR" to identify the individual who reviewed the investigation report.* **RP** Responsible Person ***Code Value Implementation Note:*** *Use when N1 is code "KA" to identify the quality assurance specialist with responsibility for resolving the reported deficiency.*	**M ID 2/2**
Required **PER02**	93	**Name** Free-form name. ***Implementation Note:*** *Use to identify the name of the individual. Do not include spaces or periods after initial.*	**O AN 1/35**
Conditional **PER03**	365	**Communication Number Qualifier** Code identifying the type of communication number. ***Implementation Note:*** *Use is recommended to identify the appropriate type of communications number which can be used to contact the specified point of contact.* **AU** Defense Switched Network	**C ID 2/2**

EM Electronic Mail
FT Federal Telecommunications System (FTS)
FX Facsimile
IT International Telephone
TE Telephone
TL Telex
TX TWX

Conditional **PER04** **364** **Communication Number** **C** **AN** **1/80**
Complete communications number including country or area code when applicable.

Conditional **PER05** **365** **Communication Number Qualifier** **C** **ID** **2/2**
Code identifying the type of communication number.

Implementation Note:
Use is recommended to identify an alternate, or secondary, communications number which can be used to contact the specified point of contact.

AU Defense Switched Network
EM Electronic Mail
FT Federal Telecommunications System (FTS)
FX Facsimile
IT International Telephone
TE Telephone
TL Telex
TX TWX

Conditional **PER06** **364** **Communication Number** **C** **AN** **1/80**
Complete communications number including country or area code when applicable.

Segment: **SE** **Transaction Set Trailer**

Level: Detail

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

Comment: SE is the last segment of each transaction set.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	SE01	96	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments.	M	N0	1/10
Mandatory	SE02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9

Implementation Note:
This number is the same as the one carried in ST02.

APPENDIX B

DRAFT IMPLEMENTATION CONVENTION FOR REPORT OF DISCREPANCY

842 Nonconformance Report

This Draft Standard for Trial Use contains the format and establishes the data contents of the Nonconformance Report Transaction Set (842) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to report products and processes that do not fulfill specifications or requirements.

The Nonconformance Report Transaction Set provides the ability for the sender to report the nonconformance at the level of detail that is required. It also provides the ability to report the specific nonconformances of a component/part while identifying the assembly as the product that is in nonconformance. The Nonconformance Report Transaction Set may be used to report, initiate, or request actions related to the nonconformance being reported. Financial and accounting information is provided for reporting purposes only.

Implementation Notes

1. This transaction set may be used to serve two basic functions regarding the reporting of item or packaging discrepancies. First, receiver of discrepant material use this transaction set to notify a source of supply or action activity that discrepant material has been received, to modify or cancel a previously submitted report, to request a reconsideration of a response, or to contest the decision stated in a response. Secondly, the source of supply or action activity uses this transaction set to notify the report initiator of any decision reached in the resolution of a Supply Discrepancy Report (SDR).

2. Any single occurrence of this transaction set is restricted to use either as a report or a response to a report. The two basic transaction types cannot be mixed within a single occurrence of this transaction set.

3. A single occurrence of this transaction set transmits a single or multiple reports or responses to a single responsible activity/organization. Each transaction reported within a transaction set may identify, or respond to, multiple discrepancies for a single line item. However, when both item discrepancies and packaging discrepancies are noted in the same shipment, a separate transaction will be transmitted.

Table 1

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
5	010	ST	Transaction Set Header	M	1	
6	020	BNR	Beginning Segment For Nonconformance Report	M	1	
8	030	REF	Reference Numbers	O	>1	
9	040	DTM	Date/Time Reference	O	>1	
N/U	050	PID	Product/Item Description	O	>1	
			LOOP ID - MEA			>1
N/U	060	MEA	Measurements	O	1	

N/U	070	DTM	Date/Time Reference	O	>1	
N/U	080	REF	Reference Numbers	O	>1	
			LOOP ID - PWK			>1
N/U	090	PWK	Paperwork	O	1	
N/U	100	REF	Reference Numbers	O	>1	
N/U	110	DTM	Date/Time Reference	O	>1	
			LOOP ID - N1			>1
10	120	N1	Name	O	1	
N/U	130	N2	Additional Name Information	O	2	
N/U	140	N3	Address Information	O	2	
N/U	150	N4	Geographic Location	O	1	
12	160	REF	Reference Numbers	O	>1	
13	170	PER	Administrative Communications Contact	O	>1	

Table 2

PAGE #	POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
			LOOP ID - HL			>1
15	010	HL	Hierarchical Level	M	1	
17	020	LIN	Item Identification	O	1	
N/U	030	PID	Product/Item Description	O	>1	
N/U	040	PRS	Part Release Status	O	>1	
N/U	050	CID	Characteristic/Class ID	O	>1	
20	060	DTM	Date/Time Reference	O	>1	
21	070	REF	Reference Numbers	O	>1	
23	075	CS	Contract Summary	O	1	
25	076	AT	Financial Accounting	O	1	
N/U	080	QTY	Quantity	O	>1	
N/U	090	TMD	Test Method	O	1	
N/U	100	PSD	Physical Sample Description	O	1	
			LOOP ID - LM			>1
N/U	104	LM	Code Source Information	O	1	
N/U	105	LQ	Industry Code	M	>1	
			LOOP ID - MEA			>1
N/U	110	MEA	Measurements	O	1	
N/U	120	DTM	Date/Time Reference	O	>1	
N/U	130	REF	Reference Numbers	O	>1	
			LOOP ID - SPS			>1
N/U	140	SPS	Sampling Parameters for Summary Statistics	O	1	
N/U	150	REF	Reference Numbers	O	>1	

N/U	160	PSD	Physical Sample Description	O	1	
			LOOP ID - MEA			>1
N/U	170	MEA	Measurements	O	1	
N/U	180	DTM	Date/Time Reference	O	>1	
N/U	190	REF	Reference Numbers	O	>1	
			LOOP ID - STA			>1
N/U	200	STA	Statistics	O	1	
N/U	210	DTM	Date/Time Reference	O	>1	
N/U	220	REF	Reference Numbers	O	>1	
			LOOP ID - NCD			>1
26	230	NCD	Nonconformance Description	O	1	
28	240	NTE	Note/Special Instruction	O	>1	
29	250	DTM	Date/Time Reference	O	>1	
30	260	REF	Reference Numbers	O	>1	
32	270	QTY	Quantity	O	>1	
33	272	AT	Financial Accounting	O	>1	
35	273	AMT	Monetary Amount	O	>1	
N/U	274	MEA	Measurements	O	>1	
			LOOP ID - N1			>1
36	280	N1	Name	O	1	
N/U	290	N2	Additional Name Information	O	2	
N/U	300	N3	Address Information	O	2	
N/U	310	N4	Geographic Location	O	1	
N/U	320	REF	Reference Numbers	O	>1	
N/U	330	PER	Administrative Communications Contact	O	>1	
			LOOP ID - LM			>1
38	333	LM	Code Source Information	O	1	
39	334	LQ	Industry Code	M	>1	
			LOOP ID - NCA			>1
40	340	NCA	Nonconformance Action	O	1	
N/U	350	NTE	Note/Special Instruction	O	>1	
N/U	360	DTM	Date/Time Reference	O	>1	
41	370	REF	Reference Numbers	O	>1	
			LOOP ID - PWK			>1
N/U	380	PWK	Paperwork	O	1	
N/U	390	REF	Reference Numbers	O	>1	
N/U	400	DTM	Date/Time Reference	O	>1	
			LOOP ID - N1			>1
N/U	410	N1	Name	O	1	
N/U	420	N2	Additional Name Information	O	2	
N/U	430	N3	Address Information	O	2	

N/U	440	N4	Geographic Location	O	1	
N/U	450	REF	Reference Numbers	O	>1	
N/U	460	PER	Administrative Communications Contact	O	>1	
			LOOP ID - LM			>1
42	465	LM	Code Source Information	O	1	
43	465	LQ	Industry Code	M	>1	
44	470	SE	Transaction Set Trailer	M	1	

NOTE:

2/010 The HL levels are item, component, product characteristic, report, and serial number. Valid HL Parent-Child relationships are 1) item - component, 2) item - product characteristic, 3) component - product characteristic, 4) report - item, 5) item - serial number, and 6) component - serial number.

Segment: ST Transaction Set Header

Level: Header

Loop: ____

Mandatory

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Semantic: The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Implementation Note:
See control structure discussion in Volume 1.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set.	M	ID	3/3
		842	X12.21 Nonconformance Report Transaction Set			
Mandatory	ST02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9

Segment: **BNR** **Beginning Segment For Nonconformance Report**

Level: Header

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the beginning of a Nonconformance Report Transaction Set.

Semantic: *1.* BNR02 is the nonconformance report identifier number.

2. BNR03 is the date that the nonconformance report was created.

3. BNR04 is the time that the nonconformance report was created.

Comment: BNR05 indicates the status or intention of the Nonconformance Report.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory **BNR01**	353	**Transaction Set Purpose Code** Code identifying purpose of transaction set. **00** Original **15** Re-Submission ***Code Value Implementation Note:*** *Use only to resubmit a transaction set in its entirety. In this situation, the content of the transaction set is the same as the original transaction set except for the transaction set preparation date, time, and cross reference number. (See Volume 1 for resubmission procedures.)*	**M**	**ID**	**2/2**
Mandatory **BNR02**	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier. ***Implementation Notes:*** *1. Assign a unique number to the transaction set for archival/audit purposes. This number relates all individual transaction(s) to the transaction set. It is distinct from any identification numbers assigned in the enveloping structure, including the ST and SE segments (all control information contained within the enveloping segments is removed prior to processing by the application software).* *2. When the transaction set is used as a resubmission of a previous transaction set, the cross reference number of the original transaction set will appear in 1/REF/030.*	**M**	**AN**	**1/30**
Mandatory **BNR03**	373	**Date** Date (YYMMDD). ***Implementation Note:*** *When using the transaction set as a resubmission of a previous transaction set, identify the date of the original transaction set in 1/DTM/040.*	**M**	**DT**	**6/6**
Required **BNR04**	337	**Time** Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959) ***Implementation Notes:*** *1. When using the transaction set as a resubmission of a previous transaction set, identify the time of the original transaction set in 1/DTM/040.*	**O**	**TM**	**4/6**

2. Express time is in the originating activity's local time.

Not Used	BNR05	886	Nonconformance Report Status Code	O	ID	2/2
Not Used	BNR06	1005	Hierarchical Structure Code	O	ID	4/4
Required	BNR07	640	Transaction Type Code Code specifying the type of transaction.	O	ID	2/2

DG Response

Code Value Implementation Note:
? Use to identify that the transaction set contains a response(s) to a report(s) of receipt of item or packaging discrepant material. Each iteration of the 2/HL/010 loop will identify each response. Use code "Z1" - Supply Process Deficiency Response when approved.

SD Supply Process Deficiency

Code Value Implementation Note:
Use to identify that the transaction set contains a report(s) of receipt of item or packaging discrepant material. Each iteration of the 2/HL/010 loop will identify an initial report, a modification of a previously submitted report, a cancellation of a previously submitted report, a request for reconsideration of a previously submitted report, or the contesting of a decision stated in a response.

Segment: REF **Reference Numbers**

Level: Header

Loop: ____

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Note:
Use only when the transaction set is used as a resubmission of a previous transaction set to identify the Message Address or ID of the original transaction set.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	REF01	128	**Reference Number Qualifier** Code qualifying the Reference Number. **ME** Message Address or ID ***Code Value Implementation Note:*** *The unique number assigned to the original transaction set for archival/audit purposes to relate all individual transaction(s) to the transaction set. It is distinct from any identification numbers assigned in the enveloping structure, including the ST and SE segments (all control information contained within the enveloping segments is removed prior to processing by the application software).*	M	ID	2/2
Required	REF02	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C	AN	1/30
Not Used	REF03	352	**Description**	C	AN	1/80

Segment: **DTM** **Date/Time Reference**

Level: Header

Loop: ____

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Implementation Note:
Use only when the transaction set is used as a resubmission of a previous transaction set to identify the date and time of preparation of the original transaction set.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time.	M	ID	3/3
		007	Effective			
			Code Value Implementation Note: *Use in transaction set resubmission to identify the date and time of preparation of the original transaction set.*			
Required	DTM02	373	**Date** Date (YYMMDD).	C	DT	6/6
Required	DTM03	337	**Time** Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)	C	TM	4/6
Required	DTM04	623	**Time Code** Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time. Since + is a restricted character, + and - are substituted by P and M in the codes that follow.	O	ID	2/2
		LT	Local Time			
Not Used	DTM05	624	**Century**	O	N0	2/2

Segment: **N1** **Name**

Level: Header

Loop: N1 **Repeat:** >1

Required — **Usage:** Optional

Max Use: 1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Implementation Note:
Use of the 1/N1/120 loop is required to identify, as appropriate, the organization preparing the report(s), the organization responsible for answering the report, the organization rerouting the report to a new/additional report recipient(s), and the organization(s) designated to receive a copy of the report(s). For a detailed description of the N1 loop, see the discussion in Volume 1.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M	ID	2/2
		41 Submitter ***Code Value Implementation Note:*** *Use to indicate the organization originating or preparing the report. Use only to submit report or discrepancies.*			
		AU Party Authorizing Disposition ***Code Value Implementation Note:*** *In a reponse, use to identify the organization preparing the response.*			
		FR Message From ***Code Value Implementation Note:*** *Use to indicate the organization rerouting the report to a new "TO" address or to additional "PK" addresses. In a response, use to identify the party/organization responding to the report of discrepancy.*			
		PK Party to Receive Copy ***Code Value Implementation Note:*** *Use to indicate a single, or multiple, organization(s) designated to receive a copy of the report.*			
		TO Message To ***Code Value Implementation Note:*** *Use to indicate the organization responsible for responding to the report.*			
Not Used	N102	93 **Name**	C	AN	1/35
Required	N103	66 **Identification Code Qualifier**	C	ID	1/2

Code designating the system/method of code structure used for Identification Code (67).

10 Department of Defense Activity Address Code (DODAAC)

Code Value Implementation Note:
Use to indicate that the designated organization is identified by use of a DODAAC.

33 Commercial and Government Entity (CAGE)

Code Value Implementation Note:
Use to indicate that the designated organization is a contractor and identified by use of a CAGE.

Required	**N104**	**67**	**Identification Code** Code identifying a party or other code.	**C**	**AN**	**2/17**

Segment: **REF** **Reference Numbers**

Level: Header

Loop: N1

Optional

Usage: Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Notes:

1. Use is optional and limited to a single repetition within each 1/N1/120 loop iteration. Segment is not used if the PER segment is not used.

2. Use in conjunction with up to three repetitions of the PER segment within each 1/N1/120 loop iteration to identify the Office Symbol of the specified point of contact.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	REF01	128	**Reference Number Qualifier** Code qualifying the Reference Number. **A6** Employee Identification Number ***Code Value Implementation Note:*** *Use to indicate the Office Symbol or origination code of the specified point of contact.*	M	ID	2/2
Required	REF02	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C	AN	1/30
Not Used	REF03	352	**Description**	C	AN	1/80

Segment: **PER** **Administrative Communications Contact**

Level: Header

Loop: N1

Optional **Usage:** Optional

Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax: *1.* P0304 — If either PER03 or PER04 is present, then the other is required.

2. P0506 — If either PER05 or PER06 is present, then the other is required.

Implementation Notes:

1. Use is optional and limited to three repetitions within each 1/N1/120 loop iteration.

2. Use in conjunction with a single repetition of the REF segment within each 1/N1/120 loop iteration to identify a point of contact associated with the specified organization and to provide up to three communication numbers at which the point of contact can be reached. PER02 is not provided on the second and third repetitions of the segment.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named.	M	ID	2/2
		IC	Information Contact			
Optional	PER02	93	**Name** Free-form name.	O	AN	1/35

Implementation Note:
Use PER02 only on the first iteration of the segment to identify the name of the individual who can answer questions regarding the report(s). Provide the rate/rank, first name, middle initial, and last name, as required. Do not include "periods" after initials.

Conditional	PER03	365	**Communication Number Qualifier** Code identifying the type of communication number.	C	ID	2/2

Implementation Note:
Use to identify the appropriate type of communications number which can be used to contact the specified point of contact.

AU Defense Switched Network
EM Electronic Mail
FT Federal Telecommunications System (FTS)
FX Facsimile
IT International Telephone
TE Telephone

Code Value Implementation Note:
Use to identify a commercial telephone number.

TL Telex

TX TWX

Conditional | **PER04** | **364** | **Communication Number** | **C** | **AN** | **1/80**
Complete communications number including country or area code when applicable.

Conditional | **PER05** | **365** | **Communication Number Qualifier** | **C** | **ID** | **2/2**
Code identifying the type of communication number.

Implementation Note:
Use to identify an alternate, or secondary, communications number which can be used to contact the specified point of contact.

AU Defense Switched Network
EM Electronic Mail
FT Federal Telecommunications System (FTS)
FX Facsimile
IT International Telephone
TE Telephone

Code Value Implementation Note:
Use to identify a commercial telephone number.

TL Telex
TX TWX

Conditional | **PER06** | **364** | **Communication Number** | **C** | **AN** | **1/80**
Complete communications number including country or area code when applicable.

Segment: **HL** **Hierarchical Level**

Level: Detail

Loop: HL **Repeat:** >1

Mandatory

Usage: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Comments: *1.* The HL Segment is used to identify levels of detail information using a Hierarchical Structure, such as relating line item data to shipment data, and packaging data to line item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the Hierarchical ID Number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order or item level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Implementation Notes:

1. The HL segment defines the looping structure for discrepancy reporting. The only acceptable types of loops are Report (which is understood to be either a report or response based on the BNR coding) and Serial Number. The type of report is defined in the LIN segment in the 2/HL/010 loop.

2. When the transaction set is used as a report, regardless of the type of report, each 2/HL/010 loop iteration represents an item for which a discrepancy report is prepared. Each Report loop iteration is considered a "parent" loop for which a discrepancy(s) can be described within a single, or multiple, 2/NCD/230 loop iterations. Each Serial Number loop iteration of the 2/HL/010 loop is considered a "child" loop which identifies serial number (or lot number) information related to each 2/NCD/230 loop iteration. If serial number (or lot number) information is not required, then no "child" loops are defined.

3. When the transaction set is used as a response, each 2/HL/010 loop iteration represents a decision related to an item included in a discrepancy report. Each loop iteration is considered a "parent" loop for which a single, or multiple, actions can be defined within each 2/NCA/340 loop iteration. Each 2/NCA/340 loop is directly related to the reported discrepancy which was identified in a 2/NCD/230 loop iteration. Each Serial Number loop iteration of the 2/HL/010 loop is considered a "child" loop which identifies serial number (or lot number) information related to each 2/NCD/230 loop iteration. If serial number (or lot number) information is not required, then no "child" loops are defined.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory	HL01	628	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure. ***Implementation Note:*** *Use as a "counter" to distinguish between and uniquely identify the number of loop iterations cited within the transaction set. The first 2/HL/010 loop iteration will cite "1", and each subsequent loop iteration will be increased incrementally by 1.*	M AN 1/12
Optional	HL02	734	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to. ***Implementation Notes:*** *1. Use only in "child" loops (e.g, the HL03 entry is "X") to identify the appropriate "parent" loop for which the subsequent information applies.* *2. Use to provide the sequential number assigned within HL01 for the Report loop iteration (parent loop) with which this serial number loop iteration (child loop) is associated. The purpose is to provide a cross reference between the item reported and the serial/lot number(s) associated with the item.*	O AN 1/12
Mandatory	HL03	735	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure. **RP** Report ***Code Value Implementation Note:*** *Use to denote that a report or response related to an item is being provided. Both the report and response are considered to be "parent" loops.* **X** Serial Number ***Code Value Implementation Note:*** *Use to identify a serial/lot number(s) related to a report or response is being provided. The serial/lot number loop is considered to be a "child" loop.*	M ID 1/2
Not Used	HL04	736	**Hierarchical Child Code**	O ID 1/1

Optional

Segment: **LIN** Item Identification

Level: Detail

Loop: HL

Usage: Optional

Max Use: 1

Purpose: To specify basic item identification data.

Syntax: *1.* C0405 — If LIN04 is present, then LIN05 is required.

2. C0607 — If LIN06 is present, then LIN07 is required.

3. C0809 — If LIN08 is present, then LIN09 is required.

4. C1011 — If LIN10 is present, then LIN11 is required.

5. C1213 — If LIN12 is present, then LIN13 is required.

6. C1415 — If LIN14 is present, then LIN15 is required.

7. C1617 — If LIN16 is present, then LIN17 is required.

8. C1819 — If LIN18 is present, then LIN19 is required.

9. C2021 — If LIN20 is present, then LIN21 is required.

10. C2223 — If LIN22 is present, then LIN23 is required.

11. C2425 — If LIN24 is present, then LIN25 is required.

12. C2627 — If LIN26 is present, then LIN27 is required.

13. C2829 — If LIN28 is present, then LIN29 is required.

14. C3031 — If LIN30 is present, then LIN31 is required.

Semantic: LIN01 is the line item identification

Comments: *1.* See the Data Dictionary for a complete list of ID's.

2. LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Implementation Notes:

1. Use is required for all "parent" loops, e.g., when HL03 is "RP". Segment is not used in a "child" loop, e.g., when HL03 is "X". (Note: Linkage of the "child" loop to the applicable control number is accomplished through the identification of the "parent" loop in the HL segment.)

2. When the transaction set is used as a report, use to define type of report and a unique control number which can be used to reference an individual report in subsequent correspondence.

3. When the transaction set is used as a response, use to identify the unique control number which references the original report to which the response refers.

4. Use in a report to identify the report purpose. Cite one of the following to indicate that the 2/HL/010 loop iteration refers to a: "R" - Original Submission "M" - Modification "S" - Request for Reconsideration "T" - Contested Decision "C" - Cancellation "F" - Query (Follow-up)

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES

Required	LIN01	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set.	O	AN	1/11

Implementation Notes:

1. Use in a report to identify the report purpose. Cite one of the following to indicate that the 2/HL/010 loop iteration refers to a: "R" - Original Submission "M" - Modification "S" - Request for Reconsideration "T" - Contested Decision "C" - Cancellation "F" - Query (Follow-up)

2. Not used in a response.

Mandatory	LIN02	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234). **A3** Locally Assigned Control Number	M	ID	2/2

Code Value Implementation Note:

Use to identify a Nonconformance Report Number which will distinguish any SDR between individual reporting organization(s) for future reference.

Mandatory	LIN03	234	**Product/Service ID** Identifying number for a product or service.	M	AN	1/30
Not Used	LIN04	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN05	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN06	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN07	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN08	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN09	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN10	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN11	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN12	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN13	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN14	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN15	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN16	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN17	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN18	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN19	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN20	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN21	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN22	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN23	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN24	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN25	234	**Product/Service ID**	C	AN	1/30
Not Used	LIN26	235	**Product/Service ID Qualifier**	O	ID	2/2
Not Used	LIN27	234	**Product/Service ID**	C	AN	1/30

Not Used	LIN28	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	LIN29	234	Product/Service ID	C	AN	1/30
Not Used	LIN30	235	Product/Service ID Qualifier	O	ID	2/2
Not Used	LIN31	234	Product/Service ID	C	AN	1/30

Segment: **DTM** Date/Time Reference

Level: Detail

Loop: HL

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Implementation Note:
Use multiple repetitions only in "parent" loops to identify various dates associated with a report or a response.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time.	M	ID	3/3
		003	Invoice ***Code Value Implementation Note:*** *Use only in original report submission to identify the date of the vendor's invoice, if available.*			
		022	Freight Bill ***Code Value Implementation Note:*** *Use only in original report submission to identify the date of the shipper's bill, if available.*			
		168	Release ***Code Value Implementation Note:*** *Use only in original report submission to identify the date that material was released by the carrier to the receiving organization (tailgate date).*			
		282	Previous Report ***Code Value Implementation Note:*** *Use in a response and in all report types, except original report submission, to identify the date of the original report submission.*			
Required	DTM02	373	**Date** Date (YYMMDD).	C	DT	6/6
Not Used	DTM03	337	**Time**	C	TM	4/6
Not Used	DTM04	623	**Time Code**	O	ID	2/2
Not Used	DTM05	624	**Century**	O	N0	2/2

Segment: REF **Reference Numbers**

Level: Detail

Loop: HL

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: R0203 — At least one of REF02 or REF03 is required.

Implementation Note:
Use in all report types and responses to identify the transaction number and suffix, as appropriate, associated with a discrepancy. Use in original report submissions to identify additional reference numbers associated with a discrepancy.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory REF01	128	**Reference Number Qualifier** Code qualifying the Reference Number.	M	ID	2/2

Implementation Note:
Unless otherwise specified, use codes as appropriate consistent with management information requirements.

BL Government Bill of Lading

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify the type of transportation document used to control the movement of the material being reported.

BM Bill of Lading Number

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify the type of transportation document used to control the movement of the material being reported.

IV Seller's Invoice Number

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify a vendor's invoice number.

MK Manifest Key Number

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify the type of transportation document used to control the movement of the material being reported.

SI Shipper's Identifying Number for Shipment (SID)

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to distinguish a single shipment number assigned by a vendor when multiple shipments have been made by a contractor for a single contract line item.

SO Shipper's Order (Invoice Number)

Code Value Implementation Note:
Use only in original report submissions. Use is optional, as required, to identify a shipper's invoice number.

TN Transaction Reference Number

Code Value Implementation Note:
Use in all report types and responses. Use is optional to identify the requisitioning organization's transaction number, as required, when the receipt is not processed under a contract number.

UG U.S. Government Transportation Control Number

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify the type of transportation document used to control the movement of the material being reported.

W8 Suffix

Code Value Implementation Note:
Use in all report types and responses. Use is optional to further identify a requisition which has been split by the ICP for processing, as required, when the receipt is not processed under a contract number.

WY Waybill Number

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify the type of transportation document used to control the movement of the material being reported.

Required	**REF02**	**127**	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**C**	**AN**	**1/30**
Not Used	**REF03**	**352**	**Description**	**C**	**AN**	**1/80**

Segment: **CS** Contract Summary
Level: Detail
Loop: HL
Optional **Usage:** Optional
Max Use: 1
Purpose: To provide information about a contract
Syntax: **P0405** — If either CS04 or CS05 is present, then the other is required.
Semantic: *1.* CS09 is the permissible overage as a percentage of the total contract line item number (CLIN) quantity.

2. CS10 is the permissible shortage as a percentage of the total contract line item number (CLIN) quantity.

3. CS11 is the permissible overage dollar value specified by the contract above which discrepancy action is taken.

4. CS14 is the Unit of Measure stipulated in the contract.

5. CS15 is the contract line item number (CLIN) unit price specified in the contract.

6. CS17 conveys the Critical Application Indicator. A "Y" indicates that a Critical Application Indicator is specified in the contract. A "N" indicates that no Critical Application Indicator is specified in the contract.

7. CS18 conveys the Special Requirements Indicator. A "Y" indicates that a Special Requirements Indicator (requiring special testing and or evaluation) is specified in the contract. A "N" indicates that no Special Requirements Indicator is specified in the contract.

Comment: CS04 may be used to identify the Contract Line Item Number (CLIN) or Extended (or Exhibit) Line Item Number (ELIN).

Implementation Notes:
1. Use in all report types and responses to identify contract information, as appropriate, associated with a receipt discrepancy.

2. Use of either CS01 or CS06, but not both, is required when the segment is used.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Optional	CS01	367	**Contract Number** Contract number.	O	AN	1/30
Not Used	CS02	327	**Change Order Sequence Number**	O	AN	1/8
Optional	CS03	328	**Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction.	O	AN	1/30

Implementation Note:
Use is optional to identify the contract call/order serial number, if applicable.

Conditional	CS04	128	**Reference Number Qualifier**	C	ID	2/2

Code qualifying the Reference Number.

C7 Contract Line Item Number

Code Value Implementation Note:
Use is optional to identify the contract line item number, if applicable.

Conditional	CS05	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	C	AN	1/30
Optional	CS06	324	**Purchase Order Number** Identifying number for Purchase Order assigned by the orderer/purchaser.	O	AN	1/22

Implementation Note:
Use to identify the Purchase Request (PR) number, if applicable.

Not Used	CS07	560	**Special Services Code**	O	ID	2/10
Not Used	CS08	433	**F.O.B. Point Code**	O	ID	2/2
Not Used	CS09	954	**Percent**	O	R	1/10
Not Used	CS10	954	**Percent**	O	R	1/10
Not Used	CS11	782	**Monetary Amount**	O	R	1/15
Not Used	CS12	336	**Terms Type Code**	O	ID	2/2
Not Used	CS13	560	**Special Services Code**	O	ID	2/10
Not Used	CS14	355	**Unit or Basis for Measurement Code**	O	ID	2/2
Not Used	CS15	212	**Unit Price**	O	R	1/14
Not Used	CS16	336	**Terms Type Code**	O	ID	2/2
Not Used	CS17	1073	**Yes/No Condition or Response Code**	O	ID	1/1
Not Used	CS18	1073	**Yes/No Condition or Response Code**	O	ID	1/1

Segment: AT Financial Accounting

Level: Detail

Loop: HL

Optional **Usage:** Optional

Max Use: 1

Purpose: To transmit financial accounting data

Comment: AT09 identifies unique local activity financial accounting information

Implementation Note:

Use only in an original report submission in conjunction with a receipt processed under a transaction number to identify the Fund Code associated with the original requisition.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Optional	AT01	1281	**Fund Code** Code identifying a specific appropriation or fund account to be charged or credited	O	ID	2/2
Not Used	AT02	1282	**Treasury Symbol Number**	O	AN	7/21
Not Used	AT03	1283	**Budget Activity Number**	O	AN	1/16
Not Used	AT04	1284	**Object Class Number**	O	AN	3/12
Not Used	AT05	1285	**Reimbursable Source Number**	O	AN	1/3
Not Used	AT06	1286	**Transaction Reference Number**	O	AN	4/20
Not Used	AT07	1287	**Accountable Station Number**	O	AN	3/8
Not Used	AT08	1288	**Paying Station Number**	O	AN	8/14
Not Used	AT09	352	**Description**	O	AN	1/80

Segment: **NCD** **Nonconformance Description**

Level: Detail

Loop: NCD **Repeat:** >1

Required

Usage: Optional

Max Use: 1

Purpose: To describe the nonconformance condition.

Syntax: **R0102** — At least one of NCD01 or NCD02 is required.

Implementation Notes:

1. Use the 2/NCD/230 loop in all reports and responses to identify the discrepancy.

2. For original submission reports multiple iterations of the 2/NCD/230 loop identify the material ordered, shipped, billed, received, and found to be discrepant, as appropriate. For all other report types only a single iteration is required to identify the loop in question.

3. Multiple iterations of the 2/NCD/230 loop may be used to report multiple discrepancies to a single responsible activity for any given report.

4. NCD03 identifies a Sequence Number which is used in conjunction with the Nonconformance Report Number (LIN02-03) to uniquely identify any reported discrepancy within a SDR when multiple discrepancies are reported. When multiple iterations of the 2/NCD/230 loop are required to identify a single discrepancy, each will cite the same Sequence Number. When a new discrepancy is reported, a new Sequence Number is assigned.

5. When the 2/HL/010 loop iterations identify serial number information, the 2/NCD/230 loop cites the specific serial number, lot number and other amplifying information. A new loop iteration is required for each serial number identified. The NCD02 and NCD03 coding will replicate that which is cited in the report/response loop in order to directly relate the serial number to the reported material.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Not Used NCD01	936	**Measurement Attribute Code**	C	ID	2/2
Required NCD02	888	**Nonconformance Determination Code** Code indicating whether a nonconforming condition was the reason for submitting or the basis upon which a nonconformance report is initiated. 1 Order ***Code Value Implementation Note:*** *Use, as required, in reports to identify information related to the original order, e.g., requisition.* 2 Shipment ***Code Value Implementation Note:*** *Use, as required, in reports to identify information related to the material actually shipped.* 3 Billing ***Code Value Implementation Note:*** *Use, as required, in reports to identify information related to the material actually billed.* 4 Receipt ***Code Value Implementation Note:*** *Use, as required, in reports to identify information related to the material actually received.* 5 Discrepant	C	ID	1/1

Code Value Implementation Note:
Use, as required, in reports to identify information related to the material actually found to be discrepant; use in all responses to relate the response to the applicable discrepancy.

Required	NCD03	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set.	O	AN	1/11

Implementation Note:
Each discrepancy reported for a single Nonconformance Report Number will cite a unique Sequence Number. The first 2/NCD/230 loop iteration will cite "1". Each new discrepancy reported for a single Nonconformance Report Number will be increased incrementally by "1".

Not Used	NCD04	750	**Product/Process Characteristic Code**	O	ID	2/3
Not Used	NCD05	559	**Agency Qualifier Code**	O	ID	2/2
Not Used	NCD06	751	**Product Description Code**	O	AN	1/12
Not Used	NCD07	352	**Description**	O	AN	1/80

Segment: **NTE** **Note/Special Instruction**

Level: Detail

Loop: NCD

Optional

Usage: Optional

Max Use: >1

Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Comment: The NTE segment permits free-form information/data which,under ANSI X12 standard implementations, is not machine processable. The use of the "NTE" segment should therefore be avoided, if at all possible, in an automated environment.

Implementation Note:
Use of the NTE segment is generally discouraged. However, when use is necessary, it is limited to original report submissions and the 2/NCD/230 loop which identifies the actual discrepancy. It may only cite narrative information related to the discrepancy when adequate coding is not available elsewhere within the transaction set.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Required	NTE01	363	**Note Reference Code** Code identifying the functional area or purpose for which the note applies.	O	ID	3/3
		DOD	Description of Damage			
Mandatory	NTE02	3	**Free Form Message** Free-form text.	M	AN	1/60

Segment: **DTM** **Date/Time Reference**

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To specify pertinent dates and times

Syntax: **R0203** — At least one of DTM02 or DTM03 is required.

Implementation Notes:

1. Use only in original report submissions. Use is limited to 2/HL/010 loop iterations related to the original report to provide serial/lot number related information.

2. Segment may be repeated up to five times to provide selected date information related to serial/lot numbers.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	DTM01	374	**Date/Time Qualifier** Code specifying type of date or time, or both date and time.	M	ID	3/3
			094 Manufacture ***Code Value Implementation Note:*** *Use, as required, to indicate when the reported material was manufactured.*			
			510 Date Packed ***Code Value Implementation Note:*** *Use, as required, to indicate when the reported material was packed.*			
			511 Shelf Life Expiration ***Code Value Implementation Note:*** *Use, as required, to indicate when the shelf life for the reported material expires.*			
			512 Warranty Expiration ***Code Value Implementation Note:*** *Use, as required, to indicate when the warranty for the reported material expires.*			
			517 Inspected ***Code Value Implementation Note:*** *Use, as required, to indicate when the reported material was inspected.*			
Required	DTM02	373	**Date** Date (YYMMDD).	C	DT	6/6
Not Used	DTM03	337	**Time**	C	TM	4/6
Not Used	DTM04	623	**Time Code**	O	ID	2/2
Not Used	DTM05	624	**Century**	O	N0	2/2

Segment: **REF** **Reference Numbers**

Level: Detail

Loop: NCD

Optional

Usage: Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Notes:

1. Use in all 2/HL/010 report and response loop iterations to identify the material being reported as either standard or non-standard material, e.g., codes CU, NS, MF, W7.

2. Use is required in all 2/HL/010 loop serial/lot number iterations to identify the serial number, lot number and material inspector, as appropriate.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory					
REF01	**128**	**Reference Number Qualifier** Code qualifying the Reference Number.	**M**	**ID**	**2/2**
		CU Clear Text Clause ***Code Value Implementation Note:*** *Use, as required, to identify the nomenclature for the referenced material when no specific identifying numbers are available. When used the nomenclature will be identified in REF03 and REF02 is not used.*			
		LT Lot Number ***Code Value Implementation Note:*** *Use, as required, to identify the specific lot number for the referenced material.*			
		MF Manufacturers Part Number ***Code Value Implementation Note:*** *Use only when an NSN is not available to indicate that the material is non-standard. If used, a second repetition of the segment is required to identify the CAGE.*			
		NS National Stock Number ***Code Value Implementation Note:*** *Use only when an NSN is available to identify the material being reported.*			
		SE Serial Number ***Code Value Implementation Note:*** *Use, as required, to identify the specific serial number for the referenced material.*			
		W5 Inspector Identification Number ***Code Value Implementation Note:*** *Use, as required, to identify the specific number assigned to the individual who inspected the referenced material.*			
		W7 Commercial and Government Entity (CAGE) Code ***Code Value Implementation Note:*** *Use is required only when manufacturer's part number is used to identify the material being reported.*			
Conditional					
REF02	**127**	**Reference Number**	**C**	**AN**	**1/30**

Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.

Implementation Note:
Use for all REF01 code qualifiers except "CU".

Conditional

REF03 352 Description **C AN 1/80**
A free-form description to clarify the related data elements and their content.

Implementation Note:
Use only for REF01 code qualifier "CU".

Segment: **QTY** Quantity
Level: Detail
Loop: NCD
Optional **Usage:** Optional
Max Use: >1
Purpose: To specify quantity information.

Implementation Note:
Use only in 2/NCD/230 loop iterations for original report submissions to identify the quantities associated with the material ordered, shipped, billed, received, and found to be discrepant, as appropriate.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity.	M	ID	2/2
			38 Original Quantity ***Code Value Implementation Note:*** *Use to identify the quantity of material actually ordered.*			
			39 Shipped Quantity ***Code Value Implementation Note:*** *Use to identify the quantity of material actually shipped.*			
			86 Nonconformance Quantity ***Code Value Implementation Note:*** *Use to identify the quantity of material reported as being discrepant.*			
			87 Quantity Received ***Code Value Implementation Note:*** *Use to identify the quantity of material actually received.*			
			94 Billable Quantity ***Code Value Implementation Note:*** *Use to identify the quantity of material actually billed.*			
Mandatory	QTY02	380	**Quantity** Numeric value of quantity.	M	R	1/15
Required	QTY03	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2

Implementation Note:
Use the unit of issue conversion table in Volume 1.

Segment: AT Financial Accounting
Level: Detail
Loop: NCD
Optional **Usage:** Optional
Max Use: >1
Purpose: To transmit financial accounting data
Comment: AT09 identifies unique local activity financial accounting information

Implementation Notes:

1. Use in the original report submission to identify the long line accounting data for the appropriation to be credited for packaging discrepancies. Not used in any other report type.

2. Use in responses to identify the long line accounting data for the appropriation to be charged for transportation services provided.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Not Used	AT01	1281	**Fund Code**	O	ID	2/2
Optional	AT02	1282	**Treasury Symbol Number** Number identifying a department, fiscal year, and appropriation limit for a standard accounting classification coding structure	O	AN	7/21
Optional	AT03	1283	**Budget Activity Number** Number identifying an administrative subdivision of funds against which a transaction is to be charged for a standard accounting classification coding structure	O	AN	1/16
Optional	AT04	1284	**Object Class Number** Number identifying the nature of the goods or services acquired and a specific office or organization using resources for a standard accounting classification coding structure	O	AN	3/12
Optional	AT05	1285	**Reimbursable Source Number** Number identifying the source of an appropriation or fund reimbursement for a standard accounting classification coding structure	O	AN	1/3
Optional	AT06	1286	**Transaction Reference Number** Number identifying an original request for goods and services to the matching financial transaction for a standard accounting classification coding structure	O	AN	4/20
Optional	AT07	1287	**Accountable Station Number** Number identifying an office responsible for entering a financial transaction into the applicable accounting system for a standard accounting classification coding structure	O	AN	3/8
Optional	AT08	1288	**Paying Station Number** Number identifying an office responsible for making a payment or collection and the corresponding voucher number under which the action was taken for a standard accounting classification coding structure	O	AN	8/14
Optional	AT09	352	**Description**	O	AN	1/80

A free-form description to clarify the related data elements and their content.

Implementation Note:
Use is optional to identify Service/Agency unique accounting information.

Segment: **AMT** **Monetary Amount**

Level: Detail

Loop: NCD

Optional **Usage:** Optional

Max Use: >1

Purpose: To indicate the total monetary amount.

Implementation Notes:

1. Use in 2/NCD/230 loop iterations for original report submissions to identify unit price and repackaging cost information associated with the material ordered, billed, and found to be discrepant.

2. All values are understood to be expressed in U. S. currency, e.g., dollars and cents.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	AMT01	522	**Amount Qualifier Code** Code to qualify amount	M	ID	1/2
			LP List Price			
			Code Value Implementation Note: *Use, as required, in the 2/NCD/230 loop which identifies original order information to indicate the unit price of the material ordered.*			
			PB Billed Amount			
			Code Value Implementation Note: *Use, as required, in the 2/NCD/230 loop which identifies material billing information to indicate the price actually billed.*			
			Z1 Repackaging Labor Cost			
			Code Value Implementation Note: *Use, as required, in the 2/NCD/230 loop which identifies material found to be discrepant to indicate the labor cost which has been incurred to correct the reported packaging discrepancies, as required.*			
			Z2 Repackaging Material Cost			
			Code Value Implementation Note: *Use, as required, in the 2/NCD/230 loop which identifies material found to be discrepant to indicate the material cost which has been incurred to correct the reported packaging discrepancies.*			
			Z3 Unit Cost Discrepant Material			
			Code Value Implementation Note: *Use, as required, in the 2/NCD/230 loop which identifies material found to be discrepant to indicate the unit price of the discrepant material.*			
Mandatory	AMT02	782	**Monetary Amount** Monetary amount.	M	R	1/15

Implementation Note:

Value must be expressed in whole dollars (with no decimal) or in dollars and cents (with a decimal included). No more than two positions may follow the decimal when used.

Segment: N1 **Name**

Level: Detail

Loop: N1 **Repeat:** >1

Optional

Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name and code

Syntax: *1.* R0203 — At least one of N102 or N103 is required.

2. P0304 — If either N103 or N104 is present, then the other is required.

Comment: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Implementation Notes:

1. Use the 2/N1/280 loop in original report submissions to identify Contract Administration Offices, Bill-To organizations, Ship-To organizations, shippers, and material storage locations, as required.

2. Use the 2/N1/280 loop in report cancellations and queries to identify Contract Administration Offices.

3. Use the 2/N1/280 loop in responses to identify Ship-To locations, mark for addresses, and Contract Administration Offices.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
Mandatory N101	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, or an individual	M ID 2/2

BT Party to be Billed For Other Than Freight(Bill To)

Code Value Implementation Note:
Use, as required, in the 2/NCD/230 original order loop to identify the Bill-To organization from the original requisition.

C4 Contract Administration Office

Code Value Implementation Note:
Use, as required, in the 2/NCD/230 discrepant material loop to identify the organization designated to administer the contract identified in the CS segment of the 2/HL/010 loop.

LG Location of Goods

Code Value Implementation Note:
Use, as required, in the 2/NCD/230 discrepant material loop to identify the location of the discrepant material when different from the organization originating the discrepancy report.

SH Shipper

Code Value Implementation Note:
Use, as required, in the 2/NCD/230 discrepant material loop to identify the organization that shipped the material.

ST Ship To

Code Value Implementation Note:
Use, as required, in the 2/NCD/230 original order loop to identify the Ship-To organization from the original requisition. Use, as required, in the 2/NCD/230 discrepant material loop in responses to indicate the organization to which the discrepant material should be sent.

Z7 Mark-for Party

Code Value Implementation Note:
Use, as required, in the 2/NCD/230 discrepant material loop in responses to identify the mark-for party for the discrepant material which is returned to the distribution system.

Conditional **N102** **93** **Name** **C** **AN** **1/35**
Free-form name.

Implementation Note:
Use only for N101 code qualifier "Z7" when the Mark-For Party is identified in a response. Provides the rate/rank, first name, middle initial, and last name, as required. Do not indicate blank spaces or "periods" after initials.

Conditional **N103** **66** **Identification Code Qualifier** **C** **ID** **1/2**
Code designating the system/method of code structure used for Identification Code (67).

Implementation Note:
Use for all N101 code qualifiers except "Z7".

10 Department of Defense Activity Address Code (DODAAC)
33 Commercial and Government Entity (CAGE)

Code Value Implementation Note:
Use CAGE when activity is a contractor.

Conditional **N104** **67** **Identification Code** **C** **AN** **2/17**
Code identifying a party or other code.

Segment: **LM** **Code Source Information**

Level: Detail

Loop: LM **Repeat:** >1

Optional

Usage: Optional

Max Use: 1

Purpose: To transmit standard code list identification information

Comment: LM02 identifies the applicable industry code list source information.

Implementation Notes:

1. Use in the 2/NCD/230 material ordered, shipped, received, and discrepant loop iterations.

2. Use the 2/LM/333 loop only in original report submissions to identify DoD unique coded data related to the characteristics and coding requirements for the type of material being reported.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	LM01	559	**Agency Qualifier Code** Code identifying the agency assigning the code values.	M	ID	2/2
		DD	Department of Defense			
Not Used	LM02	822	**Source Subqualifier**	O	AN	1/15

Segment: **LQ** Industry Code
Level: Detail
Loop: LM
Mandatory **Usage:** Mandatory
Max Use: >1
Purpose: Code to transmit standard industry codes
Syntax: **C0102** — If LQ01 is present, then LQ02 is required.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Required	LQ01	1270	**Code List Qualifier Code** Code identifying a specific industry code list	O	ID	1/3
			83 Supply Condition Code ***Code Value Implementation Note:*** *Use, as required, in the 2/NCD/230 material ordered loop to identify the desired material condition when the material was requisitioned from DRMS. Use, as required, in the 2/NCD/230 material shipped loop to identify the material condition of the material shipped when shipped from DRMS. Use in the 2/NCD/230 material received loop to identify the material condition of the material actually received. Use in the 2/NCD/230 discrepant material loop to identify the material condition of the material reported as discrepant.*			
			EJ Disposal Condition Code ***Code Value Implementation Note:*** *Use, as required, in the 2/NCD/230 material shipped loop to identify the disposal condition code of the material shipped when shipped from DRMS. Use in the 2/NCD/230 material received loop to identify the disposal condition code of the material actually received when received from DRMS. Use in the 2/NCD/230 discrepant material loop to identify the disposal condition code of the material reported as discrepant when received from DRMS.*			
			HA Discrepancy Code ***Code Value Implementation Note:*** *Use in the 2/NCD/230 discrepant material loop to identify the Discrepancy Code of the material reported as discrepant.*			
Required	LQ02	1271	**Industry Code** Code indicating a code from a specific industry code list	C	AN	1/20

Segment: **NCA** **Nonconformance Action**

Level: Detail

Loop: NCA **Repeat:** >1

Optional **Usage:** Optional

Max Use: 1

Purpose: To specify the action that is to be taken in response to a nonconformance condition.

Syntax: *1.* R0203 — At least one of NCA02 or NCA03 is required.

2. P0405 — If either NCA04 or NCA05 is present, then the other is required.

Semantic: NCA03 describes the action that is to be undertaken.

Comment: NCA04 is used to specify the quantity that is associated with NCA02 or NCA03.

Implementation Notes:

1. Use the 2/NCA/340 loop in all reports to request the action to be taken in resolving the reported discrepancy.

2. Use the 2/NCA/340 loop in responses to indicate the action taken or to be taken.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Not Used	NCA01	350	**Assigned Identification**	O	AN	1/11
Required	NCA02	887	**Nonconformance Resultant Response Code** Code identifying a response that is the result of a nonconformance situation. **RQ** Request for Disposition ***Code Value Implementation Note:*** *Use in reports to indicate that the 2/NCA/340 loop will define the action desired by the organization reporting the discrepancy.* **RS** Response Requirements Follow ***Code Value Implementation Note:*** *Use in responses to indicate that the 2/NCA/340 loop will define the actual action taken or directed by the organization processing the report.*	C	ID	1/2
Not Used	NCA03	352	**Description**	C	AN	1/80
Not Used	NCA04	380	**Quantity**	C	R	1/15
Not Used	NCA05	355	**Unit or Basis for Measurement Code**	C	ID	2/2

Segment: **REF** **Reference Numbers**

Level: Detail

Loop: NCA

Optional

Usage: Optional

Max Use: >1

Purpose: To specify identifying numbers.

Syntax: **R0203** — At least one of REF02 or REF03 is required.

Implementation Note:
Use only in responses.

Data Element Summary

REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory **REF01**	128	**Reference Number Qualifier** Code qualifying the Reference Number.	**M**	**ID**	**2/2**

Implementation Note:
Only one of codes BL, MK, BM, UG, or WB is used.

BL Government Bill of Lading

Code Value Implementation Note:
Use, as appropriate, to identify the shipment number under which material should be returned to the distribution system when so specified by the organization responding to the discrepancy report.

BM Bill of Lading Number

Code Value Implementation Note:
Use, as appropriate, to identify the shipment number under which material should be returned to the distribution system when so specified by the organization responding to the discrepancy report.

MK Manifest Key Number

Code Value Implementation Note:
Use, as appropriate, to identify the shipment number under which material should be returned to the distribution system when so specified by the organization responding to the discrepancy report.

TN Transaction Reference Number

Code Value Implementation Note:
Use, as appropriate, to identify the transaction number under which replacement material will be provided to the organization reporting the discrepancy.

UG U.S. Government Transportation Control Number

Code Value Implementation Note:
Use, as appropriate, to identify the shipment number under which material should be returned to the distribution system when so specified by the organization responding to the discrepancy report.

WY Waybill Number

Code Value Implementation Note:
Use only in original report submission. Use is optional, as required, to identify the type of transportation document used to control the movement of the material being reported.

Required **REF02**	127	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**C**	**AN**	**1/30**
Not Used **REF03**	352	**Description**	**C**	**AN**	**1/80**

Segment: **LM** **Code Source Information**

Level: Detail

Loop: LM **Repeat:** >1

Optional **Usage:** Optional

Max Use: 1

Purpose: To transmit standard code list identification information

Comment: LM02 identifies the applicable industry code list source information.

Implementation Note:
Use the 2/LM/464 loop to identify the Discrepancy Advice Code for the desired action to be taken (in reports) or action taken (responses).

Data Element Summary

	REP. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	LM01	559	**Agency Qualifier Code** Code identifying the agency assigning the code values.	M	ID	2/2
		DD	Department of Defense			
Not Used	LM02	822	**Source Subqualifier**	O	AN	1/15

Segment: **LQ** Industry Code
Level: Detail
Loop: LM
Mandatory **Usage:** Mandatory
Max Use: >1
Purpose: Code to transmit standard industry codes
Syntax: **C0102** — If LQ01 is present, then LQ02 is required.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Required	LQ01	1270	**Code List Qualifier Code** Code identifying a specific industry code list	C	ID	1/3
		HB	Discrepancy Advice Code			
Required	LQ02	1271	**Industry Code** Code indicating a code from a specific industry code list	C	AN	1/20

Segment: **SE** **Transaction Set Trailer**

Level: Detail

Loop: ____

Mandatory **Usage:** Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

Comment: SE is the last segment of each transaction set.

Implementation Note:
See control structure discussion in Volume 1.

Data Element Summary

	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
Mandatory	SE01	96	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments.	M	N0	1/10
Mandatory	SE02	329	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9

APPENDIX C

PRODUCT QUALITY DEFICIENCY REPORT FORM AND ELECTRONIC DATA INTERCHANGE

PRODUCT QUALITY DEFICIENCY REPORT FORM AND ELECTRONIC DATA INTERCHANGE

PRODUCT QUALITY DEFICIENCY REPORT

☐ CATEGORY I ☐ CATEGORY II

1a. FROM *(Originator)*		2a. TO *(Screening point)*	
1b. NAME, TELEPHONE NO. AND SIGNATURE	1c. DATE	2b. NAME, TELEPHONE NO. AND SIGNATURE	2c. DATE
3. REPORT CONTROL NO.	4. DATE DEFICIENCY DISCOVERED	5. NATIONAL STOCK NO. (NSN)	6. NOMENCLATURE
7a. MANUFACTURER/CITY/STATE	7b. MFRS. CODE	7c. SHIPPER/CITY/STATE	8. MFRS. PART NO.
9. SERIAL/LOT/BATCH NO.	10a. CONTRACT NO.	10b. PURCHASE ORDER NO.	10c. REQUISITION NO. / 10d. GBL NO.
11. ITEM ☐ NEW ☐ REPAIRED/ OVERHAULED	12. DATE RECD., MFRD., REPAIRED, OR OVERHAULED	13. OPERATING TIME AT FAILURE	14. GOVERNMENT FURNISHED MATERIAL ☐ YES ☐ NO
15. QUANTITY	a. RECEIVED	b. INSPECTED	c. DEFICIENT / d. IN STOCK
16. DEFICIENT ITEM WORKS ON/WITH — a. END ITEM *(Aircraft, mower, etc.)*	(1) TYPE/MODEL/SERIES		(2) SERIAL NO.
b. NEXT HIGHER ASSEMBLY	(1) NATIONAL STOCK NO. (NSN)	(2) NOMENCLATURE	(3) PART NO. / (4) SERIAL NO.
17. UNIT COST $	18. ESTIMATED REPAIR COST $	19a. ITEM UNDER WARRANTY ☐ YES ☐ NO ☐ UN-KNOWN	19b. EXPIRATION DATE
20. WORK UNIT CODE/EIC *(Navy and Air Force only.)*			
21. ACTION/DISPOSITION ☐ HOLDING EXHIBIT FOR ___ DAYS ☐ RELEASED FOR INVESTIGATION ☐ RETURNED TO STOCK ☐ DISPOSED OF ☐ REPAIRED ☐ OTHER *(Explain in Item 22)*			
22. DETAILS *(Describe, to best ability, what is wrong, how and why, circumstances prior to difficulty, description of difficulty, cause, action taken, including disposition, recommendations. Attach copies of supporting documents. Continue on separate sheet if necessary.)*			
23. LOCATION OF DEFICIENT MATERIAL			
24a. TO *(Action Point)*		25a. TO *(Support Point) (Use Items 26 and 27 if more than one)*	
24b. NAME, TELEPHONE NO. AND SIGNATURE	24c. DATE	25b. NAME, TELEPHONE NO. AND SIGNATURE	25c. DATE
26a. TO *(Support Point)*		27a. TO *(Support Point)*	
26b NAME, TELEPHONE NO. AND SIGNATURE	26c. DATE	27b. NAME, TELEPHONE NO. AND SIGNATURE	27c. DATE

368-[illegible]
NSN 7540-00-133-5548

STANDARD FORM 368 (REV. 10-83)
GENERAL SERVICES ADMINISTRATION
FPMR (41 CFR) 101-11.8

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION. *(Explain in detail. Continue on a separate sheet of paper, if necessary)*

29. ACTION TAKEN

30. RESULTS OF DEPOT SURVEILLANCE

INSTRUCTIONS

1a. FROM (Originator) – Complete name of activity (no acronyms when sending deficiency report across component lines), activity address codes (ACC), address including zip code of the activity originating the report.

1b. NAME, TELEPHONE NO., AND SIGNATURE – Provide name, telephone no., (include all available telephone numbers; FTS; Autovon, and commercial) and signature of an individual who can serve as a contact for questions regarding the report and/or to request exhibits or samples.

1c. DATE – Enter date report was signed and forwarded to the screening or action point.

2a. TO (Screening Point) – The originating point will complete name of the screening point activity (no acronyms when deficiency report will be sent across component lines), the activity address code (AAC), address including zip code of the screening point where the report needs to be sent by the originator's activity. For those activities that do not have screening points, leave blank.

2c. DATE – Enter the date the person finished processing the report at the screening point.

3. REPORT CONTROL NUMBER – Number assigned to report when a numbering system is used. Those activities which are reporting quality deficiencies across component lines and are to comply with the DLA Regulation 4155.24 should reference the report control number as prescribed in the regulation.

7a. MANUFACTURER/CITY/STATE – Name of the manufacturer, the maintenance contractor, or Government activity which last repaired or overhauled the deficient item. For motor vehicles or components thereof, enter name of manufacturer of the vehicle or component, as appropriate.

7b. MANUFACTURER'S CODE – Code of the manufacturer as listed in Cataloging Handbook H4.1 (Name to code), Federal Supply Code for Manufacturers (United States and Canada).

7c. SHIPPER/CITY/STATE – When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name

9. SERIAL/LOT/BATCH NO. – Manufacturer's serial, lot or batch number of deficient item as applicable.

10. CONTRACT; PURCHASE ORDER; REQUISITION; GOVERNMENT BILL OF LADING (GBL) NO. – Enter these numbers or any other available transportation document number in lieu of the GBL. Such numbers appear on the container, purchase document and/or the item. It is extremely helpful if these items are furnished when the material was supplied by GSA.

11 ITEM – Check the appropriate block; provide the dates manufactured and received in Block 12, if available

13. OPERATING TIME AT FAILURE – Time item had been in operation since new, or overhauled, or repaired when the deficiency was discovered, citing the appropriate performance element (miles, cycles, hours, etc.)

15c. QUANTITY DEFICIENT – Enter the quantity found deficient of those inspected.

15d. QUANTITY IN STOCK – Enter the quantity of material from the same manufacturer remaining in stock.

17. UNIT COST – Dollar value of the deficient item when known. Not applicable on reporting vehicles to GSA.

18. ESTIMATED REPAIR COST – Unit cost times number of units for replacement or estimated repair costs (including overhead) times number of units for correcting all the deficient items reported when it can readily be determined. Not applicable on reporting vehicles to GSA.

19. ITEM UNDER WARRANTY – Check if item is known to be covered by contractor warranty. If yes, provide expiration date.

21. ACTION/DISPOSITION – A check in the appropriate block to indicate the action taken or requested. When an exhibit or sample is being held, indicate the number of days in the space provided. (An exhibit or sample shall be held for a minimum of 30 calendar days from date the report is transmitted to the action point. Reporting activities are reminded that the packaging, packing, and shipping containers are to be held along with the exhibits to facilitate investigation.) When none of the items indicate the actions or disposition taken or requested, check "Other" and identify the nature of the action taken or requested in item 22.

23. LOCATION OF DEFICIENT MATERIAL – Address and location of deficient material.

24a. TO (Action Point) – Name, in the clear address, including zip code of the action point to which the report is being submitted.

24c. DATE – Enter the date the report was forwarded to an action point or the date the findings and recommendations were completed.

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION – Include the findings and recommendations for resolution of complaint.

29. ACTION TAKEN – State the action taken to resolve the complaint.

30. RESULTS OF DEPOT SURVEILLANCE – Show results of depot surveillance and planned action (i.e., replacement or repair by contractor, disposal, issue, etc.)

PRODUCT QUALITY DEFICIENCY REPORT

☐ CATEGORY I LIN ("GS") ☐ CATEGORY II

1a. FROM *(Originator)* N1 ("41")		2a. TO *(Screening point)* N1 ("ZQ")	
1b. NAME, TELEPHONE NO. AND SIGNATURE PER	1c. DATE DTM("168")	2b. NAME, TELEPHONE NO. AND SIGNATURE PER	2c. DATE DTM("009")

3. REPORT CONTROL NO. REF ("QR")	4. DATE DEFICIENCY DISCOVERED DTM ("516")	5. NATIONAL STOCK NO. (NSN) LIN ("FS")	6. NOMENCLATURE LIN ("CN")

7a. MANUFACTURER/CITY/STATE LIN ("ZB")	7b. MFRS. CODE LIN ("ZB")	7C. SHIPPER/CITY/STATE N1 ("SH")	8. MFRS. PART NO. LIN ("MG")

9. SERIAL/LOT/BATCH NO. LIN ("LT")	10a. CONTRACT NO.	10b. PURCHASE ORDER NO.	10c. REQUISITION NO. REF ("TN")	10d. GBL NO.

11. ITEM PID ("A") ☐ NEW ☐ REPAIRED/ OVERHAULED	12. DATE RECD., MFRD., REPAIRED, OR OVERHAULED DTM ("050")	13. OPERATING TIME AT FAILURE QTY ("OT")	14. GOVERNMENT FURNISHED MATERIAL PID ("E") ☐ YES ☐ NO

15. QUANTITY	a. RECEIVED QTY ("87")	b. INSPECTED QTY ("AO")	c. DEFICIENT QTY ("86")	d. IN STOCK QTY ("17")

16. DEFICIENT ITEM WORKS ON/WITH	a. END ITEM *(Aircraft, mower, etc.)*	(1) TYPE/MODEL/SERIES REF ("MJ"			(2) SERIAL NO. REF ("SE")
	b. NEXT HIGHER ASSEMBLY	(1) NATIONAL STOCK NO. (NSN) REF ("NS")	(2) NOMENCLATURE REF ("NS")	(3) PART NO.	(4) SERIAL NO.

17. UNIT COST $ AMT ("Z3")	18. ESTIMATED REPAIR COST $	19a. ITEM UNDER WARRANTY PID ("E") ☐ YES ☐ NO ☐ UN-KNOWN	19b. EXPIRATION DATE

20. WORK UNIT CODE/EIC *(Navy and Air Force only.)*

21. ACTION/DISPOSITION NCA ("HE")
☐ HOLDING EXHIBIT FOR ___ DAYS ☐ RELEASED FOR INVESTIGATION ☐ RETURNED TO STOCK ☐ DISPOSED OF ☐ REPAIRED ☐ OTHER *(Explain in Item 22)*

22. DETAILS *(Describe, to best ability, what is wrong, how and why, circumstances prior to difficulty, description of difficulty, cause, action taken, including disposition, recommendations. Attach copies of supporting documents. Continue on separate sheet if necessary.)*
NTE ("NCD")

23. LOCATION OF DEFICIENT MATERIAL
N1 ("LG")

24a. TO *(Action Point)* N1 ("91")		25a. TO *(Support Point) (Use Items 26 and 27 if more than one)*	
24b. NAME, TELEPHONE NO. AND SIGNATURE	24c. DATE DTM("168")	25b. NAME, TELEPHONE NO. AND SIGNATURE	25c.DATE
26a. TO *(Support Point)*		27a. TO *(Support Point)*	
26b. NAME, TELEPHONE NO. AND SIGNATURE	26c. DATE	27b. NAME, TELEPHONE NO. AND SIGNATURE	27c.DATE

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION. *(Explain in detail. Continue on a separate sheet of paper, if necessary.)*

NTE ("NCD", "REC")

29. ACTION TAKEN

NTE ("ACT")

30. RESULTS OF DEPOT SURVEILLANCE

NTE ("TRS")

INSTRUCTIONS

1a. FROM (Originator) – Complete name of activity (no acronyms when sending deficiency report across component lines), activity address codes (ACC), address including zip code of the activity originating the report.

1b. NAME, TELEPHONE NO., AND SIGNATURE – Provide name, telephone no., (include all available telephone numbers; FTS; Autovon, and commercial) and signature of an individual who can serve as a contact for questions regarding the report and/or to request exhibits or samples.

1c. DATE – Enter date report was signed and forwarded to the screening or action point.

2a. TO (Screening Point) – The originating point will complete name of the screening point activity (no acronyms when deficiency report will be sent across component lines), the activity address code (AAC), address including zip code of the screening point where the report needs to be sent by the originator's activity. For those activities that do not have screening points, leave blank.

2c. DATE – Enter the date the person finished processing the report at the screening point.

3. REPORT CONTROL NUMBER – Number assigned to report when a numbering system is used. Those activities which are reporting quality deficiencies across component lines and are to comply with the DLA Regulation 4155.24 should reference the report control number as prescribed in the regulation.

7a. MANUFACTURER/CITY/STATE – Name of the manufacturer, the maintenance contractor, or Government activity which last repaired or overhauled the deficient item. For motor vehicles or components thereof, enter name of manufacturer of the vehicle or component, as appropriate.

7b. MANUFACTURER'S CODE – Code of the manufacturer as listed in Cataloging Handbook H4.1 (Name to code), Federal Supply Code for Manufacturers (United States and Canada).

7c. SHIPPER/CITY/STATE – When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name.

9. SERIAL/LOT/BATCH NO – Manufacturer's serial, lot or batch number of deficient item as applicable.

10. CONTRACT; PURCHASE ORDER; REQUISITION; GOVERNMENT BILL OF LADING (GBL) NO. – Enter these numbers or any other available transportation document number in lieu of the GBL. Such numbers appear on the container, purchase document and/or the item. It is extremely helpful if these items are furnished when the material was supplied by GSA.

11. ITEM – Check the appropriate block; provide the dates manufactured and received in Block 12, if available.

13. OPERATING TIME AT FAILURE – Time item had been in operation since new, or overhauled, or repaired when the deficiency was discovered, citing the appropriate performance element (miles, cycles, hours, etc.)

15c. QUANTITY DEFICIENT – Enter the quantity found deficient of those inspected.

15d. QUANTITY IN STOCK – Enter the quantity of material from the same manufacturer remaining in stock.

17. UNIT COST – Dollar value of the deficient item when known. Not applicable on reporting vehicles to GSA.

18. ESTIMATED REPAIR COST – Unit cost times number of units for replacement or estimated repair costs (including overhead) times number of units for correcting all the deficient items reported when it can readily be determined. Not applicable on reporting vehicles to GSA.

19. ITEM UNDER WARRANTY – Check if item is known to be covered by contractor warranty. If yes, provide expiration date.

21. ACTION/DISPOSITION – A check in the appropriate block to indicate the action taken or requested. When an exhibit or sample is being held, indicate the number of days in the space provided. (An exhibit or sample shall be held for a minimum of 30 calendar days from date the report is transmitted to the action point. Reporting activities are reminded that the packaging, packing, and shipping containers are to be held along with the exhibits to facilitate investigation.) When none of the items indicate the actions or disposition taken or requested, check "Other" and identify the nature of the action taken or requested in item 22.

23. LOCATION OF DEFICIENT MATERIAL – Address and location of deficient material.

24a. TO (Action Point) – Name, in the clear address, including zip code of the action point to which the report is being submitted.

24c. DATE – Enter the date the report was forwarded to an action point or the date the findings and recommendations were completed.

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION – Include the findings and recommendations for resolution of complaint.

29. ACTION TAKEN – State the action taken to resolve the complaint.

30. RESULTS OF DEPOT SURVEILLANCE – Show results of depot surveillance and planned action (i.e., replacement or repair by contractor, disposal, issue, etc.)

PRODUCT QUALITY DEFICIENCY REPORT

☐ CATEGORY I ☒ CATEGORY II

1a. FROM (Originator)	2a. TO (Screening point)
Commanding Officer Fleet Support Division MCLB, Barstow, CA 92311	Commanding General Marine Corps Logistics Base Albany, GA 31704-5000

1b. NAME, TELEPHONE NO. AND SIGNATURE	1c. DATE	2b. NAME, TELEPHONE NO. AND SIGNATURE	2c. DATE
James A. Dillon DSN 282-6068	6 Oct 92	Don Du Bose DSN 567-5291	22 Oct 92

3. REPORT CONTROL NO.	4. DATE DEFICIENCY DISCOVERED	5. NATIONAL STOCK NO. (NSN)	6. NOMENCLATURE
93728-92-500	1 Oct 92	5961-00-200-7952	Transistor

7a. MANUFACTURER/CITY/STATE	7b. MFRS. CODE	7c. SHIPPER/CITY/STATE	8. MFRS. PART NO.
Harris Corporation Barstow, CA	18722	UNK	JANTX2N6788

9. SERIAL/LOT/BATCH NO.	10a. CONTRACT NO.	10b. PURCHASE ORDER NO.	10c. REQUISITION NO.	10d. GBL NO.
Lot/Date 9023	UNK	UNK	M93728- 2296-W001	UNK

11. ITEM	12. DATE RECD., MFRD., REPAIRED, OR OVERHAULED	13. OPERATING TIME AT FAILURE	14. GOVERNMENT FURNISHED MATERIAL
☒ NEW ☐ REPAIRED/ OVERHAULED	1 Oct 92	0 Hrs.	☐ YES ☒ NO

15. QUANTITY	a. RECEIVED	b. INSPECTED	c. DEFICIENT	d. IN STOCK
	1	1	1	1

16. DEFICIENT ITEM WORKS ON/WITH					
a. END ITEM (Aircraft, mower, etc.)	(1) TYPE/MODEL/SERIES				(2) SERIAL NO.
	Converter, AC Power				N/A
b. NEXT HIGHER ASSEMBLY	(1) NATIONAL STOCK NO. (NSN)	(2) NOMENCLATURE		(3) PART NO.	(4) SERIAL NO.
	5895-01-147-1727	Converter, Power		UNK	0139

17. UNIT COST	18. ESTIMATED REPAIR COST	19a. ITEM UNDER WARRANTY	19b. EXPIRATION DATE
$6.00	$ UNK	☐ YES ☐ NO ☒ UN-KNOWN	UNK

20. WORK UNIT CODE/EIC *(Navy and Air Force only.)*

21. ACTION/DISPOSITION

☒ HOLDING EXHIBIT FOR 60 DAYS ☐ RELEASED FOR INVESTIGATION ☐ RETURNED TO STOCK ☐ DISPOSED OF ☐ REPAIRED ☐ OTHER *(Explain in Item 22)*

22. DETAILS *(Describe, to best ability, what is wrong, how and why, circumstances prior to difficulty, description of difficulty, cause, action taken, including disposition, recommendations. Attach copies of supporting documents. Continue on separate sheet if necessary.)*

Per Albany msg R1717302 stock inspection revealed defective part is installed in asset identified in block 16 (a). Asset held in suspended status awaiting resolution.

23. LOCATION OF DEFICIENT MATERIAL

MCLB, Barstow, CA

24a. TO (Action Point)	25a. TO (Support Point) (Use Items 26 and 27 if more than one)
Commander DESC 1507 Wilmington Pike Dayton, OH 45444-5000	

24b. NAME, TELEPHONE NO. AND SIGNATURE	24c. DATE	25b. NAME, TELEPHONE NO. AND SIGNATURE	25c. DATE
	22 Oct 92		

26a. TO (Support Point)	27a. TO (Support Point)

26b. NAME, TELEPHONE NO. AND SIGNATURE	26c. DATE	27b. NAME, TELEPHONE NO. AND SIGNATURE	27c. DATE

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION. *(Explain in detail. Continue on a separate sheet of paper, if necessary.)*

29. ACTION TAKEN

30. RESULTS OF DEPOT SURVEILLANCE

INSTRUCTIONS

1a. FROM (Originator) – Complete name of activity (no acronyms when sending deficiency report across component lines), activity address codes (ACC), address including zip code of the activity originating the report.

1b. NAME, TELEPHONE NO., AND SIGNATURE – Provide name, telephone no., (include all available telephone numbers; FTS; Autovon, and commercial) and signature of an individual who can serve as a contact for questions regarding the report and/or to request exhibits or samples.

1c. DATE – Enter date report was signed and forwarded to the screening or action point.

2a. TO (Screening Point) – The originating point will complete name of the screening point activity (no acronyms when deficiency report will be sent across component lines), the activity address code (AAC), address including zip code of the screening point where the report needs to be sent by the originator's activity. For those activities that do not have screening points, leave blank.

2c. DATE – Enter the date the person finished processing the report at the screening point.

3. REPORT CONTROL NUMBER – Number assigned to report when a numbering system is used. Those activities which are reporting quality deficiencies across component lines and are to comply with the DLA Regulation 4155.24 should reference the report control number as prescribed in the regulation.

7a. MANUFACTURER/CITY/STATE – Name of the manufacturer, the maintenance contractor, or Government activity which last repaired or overhauled the deficient item. For motor vehicles or components thereof, enter name of manufacturer of the vehicle or component, as appropriate.

7b. MANUFACTURER'S CODE – Code of the manufacturer as listed in Cataloging Handbook H4.1 (Name to code), Federal Supply Code for Manufacturers (United States and Canada).

7c. SHIPPER/CITY/STATE – When the shipper of an item is different from the manufacturer, also include the shipper's or supplier's name.

9 SERIAL/LOT/BATCH NO. – Manufacturer's serial, lot or batch number of deficient item as applicable.

10. CONTRACT; PURCHASE ORDER; REQUISITION; GOVERNMENT BILL OF LADING (GBL) NO. – Enter these numbers or any other available transportation document number in lieu of the GBL. Such numbers appear on the container, purchase document and/or the item. It is extremely helpful if these items are furnished when the material was supplied by GSA.

11. ITEM – Check the appropriate block; provide the dates manufactured and received in Block 12, if available

13. OPERATING TIME AT FAILURE – Time item had been in operation since new, or overhauled, or repaired when the deficiency was discovered, citing the appropriate performance element (miles, cycles, hours, etc.)

15c. QUANTITY DEFICIENT – Enter the quantity found deficient of those inspected.

15d. QUANTITY IN STOCK – Enter the quantity of material from the same manufacturer remaining in stock.

17. UNIT COST – Dollar value of the deficient item when known. Not applicable on reporting vehicles to GSA.

18. ESTIMATED REPAIR COST – Unit cost times number of units for replacement or estimated repair costs (including overhead) times number of units for correcting all the deficient items reported when it can readily be determined. Not applicable on reporting vehicles to GSA.

19. ITEM UNDER WARRANTY – Check if item is known to be covered by contractor warranty. If yes, provide expiration date.

21. ACTION/DISPOSITION – A check in the appropriate block to indicate the action taken or requested. When an exhibit or sample is being held, indicate the number of days in the space provided. (An exhibit or sample shall be held for a minimum of 30 calendar days from date the report is transmitted to the action point. Reporting activities are reminded that the packaging, packing, and shipping containers are to be held along with the exhibits to facilitate investigation.) When none of the items indicate the actions or disposition taken or requested, check "Other" and identify the nature of the action taken or requested in item 22.

23. LOCATION OF DEFICIENT MATERIAL – Address and location of deficient material.

24a. TO (Action Point) – Name, in the clear address, including zip code of the action point to which the report is being submitted.

24c. DATE – Enter the date the report was forwarded to an action point or the date the findings and recommendations were completed.

28. FINDINGS AND RECOMMENDATIONS OF INVESTIGATION – Include the findings and recommendations for resolution of complaint.

29. ACTION TAKEN – State the action taken to resolve the complaint.

30. RESULTS OF DEPOT SURVEILLANCE – Show results of depot surveillance and planned action (i.e., replacement or repair by contractor, disposal, issue, etc.)

Sample PQDR Message (Format)

PRIORITY OR ROUTINE

1. FM: NAVAIRSYSCOM QADSEC WASHINGTON DC
2. TO: DIRMATMGMT HILL AFB UT/MMQA//

   INFO: NAVAIREWORKFAC NORFOLK VA

   CLASSIFICATION:

   SUBJECT: PRODUCT QUALITY DEFICIENCY REPORT
3. REPORT CONTROL NUMBER AND CATEGORY: N53121-88-0001, CATEGORY 1
4. DATE DEFICIENCY DISCOVERED: 27 Sep 88
5. NATIONAL STOCK NUMBER: 1650-00-295-4672
6. NOMENCLATURE: IMPELLER, PUMP, HYDRAULIC, CONTROL
7. A. MANUFACTURER/CITY/STATE: GENERAL MECHANICS, AKRON, OHIO 44309

   B. MFRS CODE: 53121

   C. SHIPPER/CITY/STATE: (Identify shipper if different from manufacturer when known.)
8. MANUFACTURER'S PART NUMBER: P/N IMP 693
9. SERIAL/LOT/BATCH NUMBER: SN 1359B
10. A. CONTRACT NO: F41608-83C-0082

    B. PURCHASE ORDER NO: PO 7593

    C. REQUISITION NO: N68693-9123-0001

    D. GBL NO: C1771161
11. NEW OR OVERHAULED: NEW
12. DATE RECD, MFRD, REPAIRED, OR OVERHAULED: N/A

See joint Telecommunications Directives (AR 105-32, USN PLAD 1, AFR 10-4 USMCEB Pub 6, ACP 117, paragraph 12D) for correct message format.

ELECTRONIC DATA INTERCHANGE EXAMPLE OF A PQDR

NOTES	ASC X12 FORMAT	SAMPLE PQDR CONTENT
Interchange Control Header, ISA Segment	ISA*00*0000000000*01*PASSWORDME*01*123456789bbbbbb*987654321bbbbbb*921113*2210*U*00204*000000008*0*P*: N/L	**OUTSIDE ENVELOPE**
Functional Group Header, GS Segment	GS*IN*012345678*087654321*900509*2210*000001*X*002040 N/L	**INSIDE ENVELOPE**
Transaction Set Header, ST Segment	ST*842*0001 N/L	**PQDR**
	BNR*00*000001*921113***QD N/L	Purpose: Report Transaction ID: 000001 Date Prepared: 11/13/92 Type of Report: PQDR
	N1*41**10*M12345 N/L PER*PU*JAMES A. DILLON*AU*2826068 N/L	ORIGINATOR Commanding Officer Fleet Support Division MCLB Barstow, CA 92311 CONTACT James A. Dillon DSN 282-6068
	N1*ZQ**10*M23456 N/L PER*QM*DON DU BOSE*AU*5675291 N/L	SCREENING POINT Commanding General Marine Corps Logistics Base Albany, GA 31704-5000 CONTACT Don Du Bose DSN 567-5291
	N1*91**10*B12345 N/L	ACTION POINT Commander DESC 1507 Wilmington Pike Dayton, OH 45444-5000
	HL*1**I N/L	This is the first report for this transaction.
	LIN*A*FS*5961012007952*MG*JANTX2N6788*CN*TRANSISTOR*ZB*18722*LT*9023 N/L	This is an initial PQDR. The NSN of the material is 5961012007952. The manufacturer's part number is JANTX2N6788. The material is a transitor manufactured by Harris Corp (CAGE #18722). The lot number of the material is 9023.

ELECTRONIC DATA INTERCHANGE EXAMPLE OF A PQDR (Continued)

NOTES	ASC X12 FORMAT	SAMPLE PQDR CONTENT
	PID*F****A N/L	The material being reported is new material.
	DTM*168*921006 N/L DTM*009*921022 N/L DTM*168*921022 N/L DTM*050*921001 N/L	Report Forwarded to Screening Point 1 Oct 1992 Screening Point Processing Completed 22 Oct 1992 Forwarded to Action Point 22 Oct 1992 Material Received 1 Oct 1992
	REF*QR*93728-92-500 N/L REF*MJ**AC POWER CONVERTER N/L REF*NS*5895011471727*POWER CONVERTER N/L REF*89*0139N/L REF*BZ*II N/L REF*TN*M937282296W001 N/L	RCN: 93728-92-500 End item model: AC power converter NHA NSN: 5895011471727 NHA Description: Power converter NHA Serial Number: 0139 PQDR Category: II Requisition No. M93728-2296-W001
	QTY*87*1 N/L QTY*AO*1 N/L QTY*17*1 N/L NCD**Y N/L NTE*NCD*PER ALBANY MSG R171730Z STOCK INSPECTION REVEALED DEFECTIVE PART IS INSTALLED IN N/L NTE*DOD*ASSET IDENTIFIED IN BLOCK 16 (A). ASSET HELD IN SUSPENDED STATUS AWAITING RESOLUTION	Quantity Received: 1 Quantity Inspected: 1 Quantity In Stock: 1 A nonconforming condition is the reason for the submittal of this report. That reason is provided in free-form text within two NTE segments.
	DTM*516*921006 N/L	Deficiency Discovered 6 Oct 1992
	QTY*86*1 N/L	Quantity Deficient: 1
	QTY*OT*0*HR N/L	Operating Time At Failure: 0 hours
	AMT*Z3*6 N/L	Unit Cost: $6
	N1*SH*UNK N/L N1*LG**10*M12345 N/L	Shipper: Unknown Location of Material: MCLB, Barstow, CA
	NCA*A*HE**60*DA N/L	Action/Disposition: Holding Exhibit for 60 Days
Transaction Set Trailer	SE*33*000001 N/L	
Function Group Trailer	GE*1*000001 N/L	
Interchange Control Trailer	IEA*1*000000008 N/L	

PRODUCT QUALITY DEFICIENCY INVESTIGATION REPORT	1. INVESTIGATOR'S CONTROL NUMBER
2. FROM:	4. ORIGINATOR'S CONTROL NUMBER
	5. CONTRACT NUMBER
3. TO: *(Type full address within brackets below)* [ ]	6. NSN
	7. MANUFACTURER'S PART NUMBER
8. NOMENCLATURE	
9. NAME AND ADDRESS OF COMPLAINT INITIATOR	10. NAME AND ADDRESS OF CONTRACTOR
11. REFERENCES AND DESCRIPTION OF DEFICIENCY	
12. CAUSE OF DEFICIENCY	
13. CORRECTIVE ACTION (BY CONTRACTOR)	
(FORM CONTINUES ON REVERSE SIDE)	

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14. CORRECTIVE ACTION (BY GOVERNMENT)		
15. EVALUATION OF CURRENT PRODUCTION		
16. CONTRACTOR'S POSITION WITH RESPECT TO REPAIR OR REPLACEMENT		
17. REMARKS AND/OR RECOMMENDATIONS		
18. ENCLOSURES TO THIS REPORT AND DISTRIBUTION OF COPIES		
19. TYPE OF REPLY ☐ INTERIM ☐ FINAL	19A. REPLY DATE	20. PREPARED BY
21. REVIEWED BY		22. APPROVED BY

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REPORT DOCUMENTATION PAGE

Form Approved
OPM No. 0704-0188

1. AGENCY USE ONLY *(Leave Blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	Mar 93	Final

4. TITLE AND SUBTITLE
Using Electronic Data Interchange to Report Product Quality

5. FUNDING NUMBERS
C MDA903-90-C-0006
PE 0902198D

6. AUTHOR(S)
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Donald T. Frank

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8. PERFORMING ORGANIZATION REPORT NUMBER
LMI-DL207R1

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Defense Logistics Agency
Cameron Station
Alexandria, VA 22304-6100
Attn: Ray Conchieri

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT
A: Approved for public release; distribution unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

The Product Quality Deficiency Report (PQDR) is a Department of Defense form that identifies deficiencies in the manufacture, repair, or procurement of materiel. It may be used by DoD employees or contractors to identify defects at any point in the item's life.

DoD generates nearly 75,000 such deficiency reports each year. In most cases when a defect is identified, Standard Form (SF) 368 is completed and sent to the activity managing the contract under which the materiel was procured. That activity, usually in conjunction with the contractor, investigates the complaint, attempts to determine a cause and a corrective action, and must make some disposition of the defective materiel. The process is labor- and paper-intensive and time-consuming.

Technology can reduce the costs of the process and at the same time improve timeliness by electronically exchanging discrepancy data between activities. Electronic data interchange (EDI) is one technology for electronically passing PQDR data. It is widely used in industry and increasingly within DoD. DMRD 941 defines DoD's commitment to use EDI and cites the PQDR and other discrepancy reports as early candidates for EDI. In this report, we describe how EDI can be linked to changes in PQDR processing practices to provide further improvements.

14. SUBJECT TERMS
EDI, Product Quality Deficiencies

15. NUMBER OF PAGES
176

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL